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(54) Title: MODIFIED DEACETOXYCEPHALOSPORIN C SYNTHASE (DAOCS) AND X-RAY STRUCTURE

(57) Abstract

Three–dimensional crystal structure(s) of deacetoxycephalosporin C synthase (DAOCS) are described. The X–ray co–ordinates provide precise 3–dimensional information of amino acids within the structure of DAOCS. Some of these are in complexes with iron and/or substrates. Information from the structures is used to modify enzymes of the cephalosporin biosynthesis pathway including DAOCS, deacetylcephalosporin C synthase DAOC/DACS, such that they accept unnatural substrates (e.g. penicillins G, V) in order to improve the production of beta–lactam antibiotics. The structures may be used to predict the structures of other 2–oxoglutarate dependent enzymes, thereby allowing the design of inhibitors, and new catalysts for the production of e.g. oxidised amino acids/peptides. Specific modifications of amino acid residues are proposed and exemplified.

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MODIFIED DEACETOXYCEPHALOSPORIN C SYNTHASE (DAOCS) AND X-RAY STRUCTURE

Penicillin and cephalosporin antibiotics are produced either directly by fermentation or by modification of fermentation derived materials containing a beta-lactam ring. The biosynthetic pathway to the penicillins and cephalosporins has been extensively studied and reviewed (J. E. Baldwin and C. J. Schofield, in 'The Chemistry of β-lactams (Ed. M. I. Page), Chapter 1, Blackie, London 1992; Ingolia and Queener, Med. Res. Rev., 1989, 9, 245-264; Aharonowitz, Cohen and Martin, Ann. Rev. Microbiol., 1992, 46, 461-495; Schofield, Bycroft, Baldwin, Hadju, Roach, Current Opinion in Structural Biology, 1997, 7, 857-864) and includes the following steps (Figure 1):

1. Conversion of the tripeptide: L-δ-α-aminoadipoyl-L-cysteinyl-D-valine (ACV) to isopenicillin N in a step catalysed by isopenicillin N synthase (IPNS). This step is common to both penicillin and cephalosporin biosynthesis.

2. In some organisms (*e.g. Penicillium chrysogenum* and *Aspergillus nidulans*) isopenicillin N is converted by exchange of its L-δ-α-aminoadipoyl side chain to penicillins with other side chains, which are normally more hydrophobic than the side chain of isopenicillin N. This conversion is catalysed by an amidohydrolase/ acyltransferase enzyme. Examples of penicillins produced by this biosynthetic process include penicillin G (which has a phenylacetyl side chain) and penicillin V (which has a phenoxyacetyl side chain). These hydrophobic penicillins may be commercially produced via fermentation under the appropriate conditions.

3. In other organisms (e.g. *Streptomyces clavuligerus* and *Cephalosporium acremonium*) isopenicillin N is epimerised to penicillin N. This reaction is catalysed by an epimerase enzyme.

4. In some organisms (*e.g. S. clavuligerus and C. acremonium*) penicillin N is converted to DAOC. This reaction is catalysed by deacetoxycephalosporin C synthase (DAOCS) in some organisms (e.g. *Streptomyces clavuligerus*) and by deacetoxy/deacetylcephalosporin C synthase (DAOC/DACS) in others (e.g. *C. acremonium*).

5. In some organisms (e.g. *S. clavuligerus* and *C. acremonium*) DAOC is converted to deacetylcephalosporin C (DAC). This reaction is catalysed by deacetylcephalosporin C synthase (DACS) in some organisms (e.g. *S. clavuligerus*) and by deacetoxy/deacetylcephalosporin C synthase (DAOC/DACS) in others (e.g. *C. acremonium*).

Further biosynthetic steps to give other cephalosporin derivatives may also occur, e.g. in *C. acremonium* DAC may be converted to cephalosporin C and in *Streptomyces spp.* DAC may be converted to cephamycin C. The genes encoding for each of the enzymes catalysing steps 1-6 above have been identified and sequenced.

Fermented penicillins, cephalosporins and their biosynthetic intermediates are useful as antibiotics or as intermediates in the production of antibiotics. Penicillins with hydrophobic side chains may be used for the preparation of cephalosporins or intermediates used in the preparation of cephalosporins, e.g. penicillins (including penicillin G and penicillin V) may be used to prepare C-3 exomethylene cephams which may be used as intermediates in the preparation of the commercial antibiotics, *e.g.* Cefachlor.

The enzymes IPNS, DAOCS, DACS and DAOC/DACS are members of an extended family of Fe(II) utilising oxidase and oxygenase enzymes. Most of this family (including DAOCS, DACS and DAOC/DACS) utilise a 2-oxo acid (normally 2-oxoglutarate) as a cosubstrate in addition to dioxygen and the 'prime' substrate (e.g. penicillin N in the case of DAOCS). Since IPNS, does not use 2-oxoglutarate, it has a substantially different mechanism to the 2-oxoglutarate dependent oxygenases, and this gives

rise to a significantly different active site.

The Invention

This invention is based on the determination of the three dimensional crystal structure of DAOCS and the information and developments which come from it. The X-ray co-ordinates provide very detailed 3-dimensional information on the relationships between amino acid residues in the structure of DAOCS and on the binding modes of the Fe-cofactor and the substrates to DAOCS. The structure allows the modification of DAOCS and related enzymes of penicillin and cephalosporin biosynthesis (including DACS and DAOC/DACS) in order to alter their substrate and product selectivities. Since the DAOCS structures are the first from the family of 2-oxoglutarate dependent dioxygenases they also allow for the design of new inhibitors of this family of enzymes. Previously partial overviews of the structures of IPNS complexed to manganese and IPNS complexed to iron and ACV were reported (Roach *et al.*, Nature, 1995, 375, 700-704; Roach *et al.*, Nature, 1997, 387, 827). The structures, as defined by their X-ray co-ordinates, of IPNS complexed to manganese and in complexes with iron, ACV and/or substrate analogues have been reported in Baldwin, Hajdu, Roach, Hensgens, Clifton, GB 9621486.1- (Oxygenase Enzymes and Method).

Procedures have been developed for the production of 7-aminodeacetoxycephaosporin C (7-ADCA) in which recombinant *P. chrysogenum* strains into which the DAOCS gene has been introduced are used for the production of cephalosporins. In particular if adipic acid is added to these recombinant strains adipoyl-6-APA is produced, which is converted by DAOCS into adipoyl-7-ADCA from which the adipoyl side chain can be removed (EPA-A-0532341, Shibata *et al.*, Bioorg. Med. Chem. Letts, 1996, 6, 1579-1584).

The IPNS gene sequence (and therefore the amino acid

sequence) is related but significantly different to those of DAOCS, DACS, DAOC/DACS. It is likely that gross elements of the fold (i.e. significant elements within the 3-dimensional structure) of these enzymes will be conserved but that the active site architecture will be very significantly different. Structural elements conserved are likely to include the beta-barrel 'jelly roll' core and certain alpha-helices (including alpha helix-10, as defined in Roach *et al.*, Nature, 1995, 375, 700-704). The degree of similarity is insufficient to define the precise structure of DAOCS, DACS, or DAOC/DACS from the IPNS structures. To date no models of DAOCS, DACS, or DAOC/DACS based on the IPNS structure have been reported. Nor have any detailed studies on substrate binding of these enzymes been reported. One report (WO 97/20053) claims the use of products resulting from modification of certain residues in DAOCS for the improved conversion of penicillin G to phenyl acetyl (G)-7-aminocephalosporanic acid.

The three-dimensional structure of DAOCS is defined by the X-ray co-ordinates set out below (Structure A).

Also set out below is a high resolution crystal structure of a complex of prokaryotic DAOCS from *S. clavuligerus* with Fe(II) and 2-oxoglutarate (Structure B).

In part the present invention relates to the use of the structures of DAOCS in order to make modifications to it or DACS or DAOC/DACS in order that the modified enzymes catalyse the conversion of unnatural penicillins (e.g. penicillin G and penicillin V) to cephalosporins more efficiently than the wild-type enzyme. Further aspects of the invention relate to the use of the DAOCS structure in order to produce unnatural products in micro-organisms. Such products include exomethylene cephalosporins, with or without alpha-aminoadipoyl or hydrophobic side chain (e.g. phenylacetyl or phenoxyacetyl). Thus one aspect of this invention refers to the use of the structure of DAOCS for modifying DAOCS

(or the closely related enzymes DACS or DAOC/DACS) in order to:

(i) permit the enzyme to accept (or accept more efficiently) unnatural penicillin substrates for the preparation of new or commercially valuable antibacterial materials.

(ii) enable the modified enzyme to produce unnatural (e.g. exomethylene cephams) or optimise the production of minor products (e.g. 3-β-hydroxycephams) for use as antibacterials or as intermediates in the preparation of antibacterials or commercially valuable compounds.

In another aspect this invention provides modified enzymes that result from application of the aforementioned techniques. These are enzymes having significant (as defined below) sequence and thus structural similarity with DAOCS. Thus, structures of these enzymes may be predicted on the basis of the DAOCS structures. Preferably there will be sequence similarity/identity between most of the modified enzyme and a major part of DAOCS. Previous sequence comparisons (Roach *et al.*, Nature, 1995, 375, 700), using pairwise comparisons of the sequences followed by single linkage cluster analysis show that IPNS, DAOCS, DACS and DAOC/DACS cluster with standard deviations scores of >5.0 (Barton and Sternberg, J. Mol. Biol., 1987, **198**, 327). Scores over 5.0 and preferably over 6.0 indicate that the sequence alignments will be correct within all or most of the protein secondary structural elements (Barton, Methods in Enzymol., 1990, **183**, 403); thus they have significantly similar sequences and hence structures. Note there are other criteria which may be used to ascertain significant sequence similarity for example % identity or % similarity of amino acids possessing side chains with similar physico-chemical properties (Barton and Sternberg, J. Mol. Biol., 1987, **198**, 327). Thus, on the basis of sequence comparisons it is possible to predict the structure of one enzyme (e.g. DACS or DAOC/DACS) from another closely related enzyme (e.g. DAOCS). Further, it is recognised that although two enzymes may have structures in which secondary structural elements are

largely or wholly conserved, differences in the structures of the two enzymes may result from the side chains of the amino acids forming the secondary structural elements. The effect of these differences, which alter the substrate/product selectivities of the compared enzymes, is predictable once the three-dimensional structure of one of the enzymes is known.

In another aspect the invention provides an enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the side chain binding site of penicillin N or DAOC is modified and at at least one of the following sites at least one amino acid residue is changed to another amino acid residue or is deleted: Thr72, Arg74, Arg75, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301, Tyr302, Val303, Asn304; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

Modifications of this kind will permit the expansion of penicillin V or penicillin G to the corresponding cephalosporins. To achieve this it is desirable to increase the kcat/Km for the mutant as compared to the wild type DAOCS. Kinetic results indicate that apparent kcat values for penicillin N and penicillin G are similar but that Km is much higher for penicillin G. Thus based on these analysis, a decrease in the binding constant of DAOCS for penicillin G should make it possible to increase kcat/Km for penicillin G.

The side chain binding pocket of DAOCS is made of residues from different parts of the peptide chain, so it is likely that more than one residue will have to be altered to make a better penicillin G/V expander. Nevertheless some residues are more important than others. Examination of the interactions between the last few C-terminal residues (Thr-308 to Ala-311) of one DAOCS molecule and the active site of another in the crystal structure, suggests a binding mode for the penicillin nucleus which

is shown in Figure 2 of the accompanying drawings. The penam C-3 carboxylate group probably occupies an analogous position to that of Ala-311 from a symmetry related molecule in the active site, forming electrostatic interactions with Arg-162 and Arg-160. The side chain of Arg-160 may also form a hydrogen bonding interaction with the β-lactam carbonyl.

It needs to be borne in mind that protein specificity is generally controlled by more than one amino acid. To alter the specificity of a protein in a major way is likely to require more than one of the mutational changes suggested below, although each of the mutations will contribute. With this in mind, preferred residues to modify for the expansion of a penicillin are as follows:

a) Arg-266. This residue binds with the α-aminoadipate side chain of the natural substrate and should be changed to a residue of more hydrophobic character, e.g. Phe, Ala, Val, Leu, Ile.

b) Thr-72. This should be changed to a hydrophobic residue e.g. Val, Leu, Ile, Phe, Ala, to help bind the hydrophobic side chain of penicillin G. It should be effective in combination with other mutants.

c) Arg-74 may be usefully changed to a neutral or hydrophobic residue (Phe, Tyr, Val, Leu, Ile, Ala). Modification of Arg-75 may be necessary in addition because it forms a hydrogen-bonding network with Arg-74.

d) Glu-156. This residue binds with the α-aminoadipate side chain. It should be changed to one of Ala, Val, Leu, Ile, Phe, Tyr, Trp, Asn, Gln, Ser.

e) The side chains of Leu-158, Asn-301 and Tyr-302 form part of the binding pocket for the penicillin side chain and can be usefully modified to more hydrophobic character.

f) Asn-304. This residue binds the amide linking the side chain to the penam nucleus. Modification is effected to expand penicillins with shortened or no side chains (e.g. to Asp or Glu for 6-Apa).

Note that other changes may be used to construct part or all of a side chain binding pocket via hydrogen bonding or other interactions.

The insertion or deletion of residues into the DAOCS sequence may also be of use in constructing a hydrophobic binding pocket for the penicillin side chain. Insertion of hydrophobic residues into the C-terminal region (residue 300-311 and in particular 301-303) may assist in the construction of a hydrophobic binding pocket for penicillin side chains.

In another aspect the invention provides an enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the penicillin/cephalosporin binding site of penicillin N or DAOC is modified and at at least one of the following amino acid residues is changed or deleted: Ile88, Arg160, Arg162, Phe164, Met180, Thr190, Ile192, Phe225, Pro241, Val245, Val262, Phe264, Asn304, Ile305, Arg306, Arg307; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

Further discussion of this aspect may be found in Nature Volume 394, pages 805-809 published on 20 August 1998 and incorporated by reference herein.

Another aspect of the invention refers to the use of the structure of DAOCS in order to modify its active site (or that of a structurally related 2-oxoglutarate dependent dioxygenase) in order that the modified enzyme accepts non beta lactam substrates in order to produce oxidised compounds of value. Oxidised amino acids (e.g. 4-hydroxyprolines, hydroxylysines, hydroxyaspartic acids and others) are useful as synthetic intermediates in the production of valuable materials. Using the structure of DAOCS specific residues can be targeted for modification in order that the modified enzyme can be used to produce oxidised amino acids or peptides. The process may include modification of the following residues:

Arg74, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301, Tyr302, Val303, Asn304, Ile88, Arg162, Phe164, Met180, Thr190, Ile192, Pro241, Val245, Val262, Ile305, Arg306, Arg307.

Another aspect of the invention refers to the use of the DAOCS structure for the design of selective inhibitors of 2-oxoglutarate dependent dioxygenases. The 2-oxoglutarate dependent dioxygenase prolyl 4-hydroxylase has been the target of inhibition in order to provide a therapeutic treatment for fibrotic diseases (e.g. liver cirrhosis, arthritis). However, no inhibitors are in clinical use, probably because it is difficult to achieve selective inhibition of the target enzyme for inhibition over other enzymes (including 2-oxoglutarate dependent enzymes). The structure of DAOCS provides a template for the design of inhibitors of 2-oxoglutarate dependent dioxygenases.

Set out below are two high resolution crystal structures for DAOCS from *S. clavuligerus:* the structure of the iron-free apoenzyme (Structure A) and the structure of the complex with Fe(II) and 2-oxoglutarate (Structure B). The results imply a mechanism by which the enzyme-Fe(II) complex reacts with 2-oxoglutarate and dioxygen to give the reactive ferryl species, a process common to many non-haem oxygenases. Other notable 2-oxoacid-dependent ferrous enzymes are prolyl hydroxylase, involved in collagen biosynthesis, gibberellin 3β-hydroxylase, a mutation of which influences stem length in plants, and clavaminic acid synthase, involved in the biosynthesis of the β-lactamase inhibitor, clavulanic acid. Within the family of 2-oxoacid-dependent enzymes, DAOCS belongs to a sub-family, the members of which show sequence similarity with IPNS and 1-aminocyclopropane-1-carboxylate oxidase (the ethylene forming enzyme), enzymes that do not use a 2-oxoacid in catalysis.

The iron-free form of DAOCS crystallises in space group R3

as a crystallographic trimer. The main chain of the protein folds into a conserved jelly roll core with flanking helices.

Co-ordinates and structure factors have been deposited with the Protein Data Bank (entries 1rxg, and r1rxgsf for the Fe(II)-2-oxoglutarate complex).

LEGENDS TO FIGURES.

Figure 1: the biosynthetic pathway to the penicillins and cephalosporins.

Figure 2 is a view of the active site of DAOCS showing 2-oxoglutarate binding to the iron and proposed penicillin N binding. Interactions with the side chains of certain amino acid residues are indicated by arrows.

Structure A is a three-dimensional structure of DAOCS.

Structure B is a high resolution crystal structure for prokaryotic DAOCS from *S. clavuligerus* as a complex with Fe(II) and 2-oxoglutarate.

The peptide sequence of DAOCS (with the numbering used herein) is set out below:

Met Asp Thr Thr Val Pro Thr Phe Ser Leu 10
Ala Glu Leu Gln Gln Gly Leu His Gln Asp 20
Glu Phe Arg Arg Cys Leu Arg Asp Lys Gly 30
Leu Phe Tyr Leu Thr Asp Cys Gly Leu Thr 40
Asp Thr Glu Leu Lys Ser Ala Lys Asp Leu 50
Val Ile Asp Phe Phe Glu His Gly Ser Glu 60
Ala Glu Lys Arg Ala Val Thr Ser Pro Val 70
Pro Thr Met Arg Arg Gly Phe Thr Gly Leu 80
Glu Ser Glu Ser Thr Ala Gln Ile Thr Asn 90
Thr Gly Ser Tyr Ser Asp Tyr Ser Met Cys 100
Tyr Ser Met Gly Thr Ala Asp Asn Leu Phe 110
Pro Ser Gly Asp Phe Gly Arg Ile Trp Thr 120
Gln Tyr Phe Asp Arg Gln Tyr Thr Ala Ser 130
Arg Ala Val Ala Arg Glu Val Leu Arg Ala 140
Thr Gly Thr Glu Pro Asp Gly Gly Val Glu 150
Ala Phe Leu Asp Cys Glu Pro Leu Leu Arg 160
Phe Arg Tyr Phe Pro Gln Val Pro Glu His 170
Arg Ser Ala Glu Glu Gln Pro Leu Arg Met 180
Ala Pro His Tyr Asp Leu Ser Met Val Thr 190
Leu Ile Gln Gln Thr Pro Cys Ala Asn Gly 200
Phe Val Ser Leu Gln Ala Glu Val Gly Gly 210
Ala Phe Thr Asp Leu Pro Tyr Arg Pro Asp 220
Ala Val Leu Val Phe Cys Gly Ala Ile Ala 230
Thr Leu Val Thr Gly Gly Gln Val Lys Ala 240
Pro Arg His His Val Ala Ala Pro Arg Arg 250
Asp Gln Ile Ala Gly Ser Ser Arg Thr Ser 260
Ser Val Phe Phe Leu Arg Pro Asn Ala Asp 270
Phe Thr Phe Ser Val Pro Leu Ala Arg Glu 280
Cys Gly Phe Asp Val Ser Leu Asp Gly Glu 290
Thr Ala Thr Phe Gln Asp Trp Ile Gly Gly 300
Asn Tyr Val Asn Ile Arg Arg Thr Ser Lys 310
Ala 311

STRUCTURE A

CRYST1	106.400	106.400	71.100	90.00	90.00	120.00
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SCALE2		0.000000	0.010852	0.000000	0.000000	
SCALE3		0.000000	0.000000	0.014065	0.000000	

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ANISOU  1    N   AMET 1    8315    2319    6203   -614  -3454  -791
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ANISOU  2    CA  AMET 1    9037    3006    3117   -786  -1026  -296
ATOM    3    C   AMET 1   30.472  12.900  59.956 0.542 28.97
ANISOU  3    C   AMET 1    4807    3113    3086   -421  -2189  -119
ATOM    4    O   AMET 1   29.961  12.670  61.055 0.542 28.12
ANISOU  4    O   AMET 1    3925    2381    4377   -402  -1097  7 4
ATOM    5    CB  AMET 1   29.970  11.328  58.023 0.542 34.85
ANISOU  5    CB  AMET 1    7877    3692    1672    30  -91  -373
ATOM    6    CG  AMET 1   28.626  12.015  57.903 0.542 38.19
ANISOU  6    CG  AMET 1    7367    4873    2270    133   912  -1765
ATOM    7    SD  AMET 1   27.564  11.232  56.654 0.542 47.19
ANISOU  7    SD  AMET 1    6146    7957    3827   -2344 1050  -1326
ATOM    8    CE  AMET 1   28.129  11.973  55.135 0.542 27.10
ANISOU  8    CE  AMET 1    5030    2111    3155    2345  -1467   - 9
ATOM    9    N   AASP 2   30.592  14.105  59.425 0.268 30.20
ANISOU  9    N   AASP 2    4674    3022    3777   -1210 -782  -383
ATOM    10   CA  AASP 2   29.993  15.322  59.963 0.268 34.22
ANISOU  10   CA  AASP 2    5567    2803    4633   -1106 -964  -525
ATOM    11   C   AASP 2   28.494  15.268  59.655 0.268 33.34
ANISOU  11   C   AASP 2    5665    1997    5006   -314  -1457  8 7 7
ATOM    12   O   AASP 2   28.099  15.650  58.551 0.268 44.76
ANISOU  12   O   AASP 2    6859    5248    4901   -1023 -1582  1 6 3 1
ATOM    13   CB  AASP 2   30.629  16.528  59.281 0.268 25.98
ANISOU  13   CB  AASP 2    4424    3085    2361    322   -1794  5 8 2
ATOM    14   CG  AASP 2   29.978  17.862  59.553 0.268 38.05
ANISOU  14   CG  AASP 2    6456    2611    5389   -501  -608  -1114
ATOM    15   OD1 AASP 2   28.995  17.937  60.318 0.268 42.35
ANISOU  15   OD1 AASP 2    6406    504  9179    873    920 1 9 9 1
ATOM    16   OD2 AASP 2   30.449  18.885  58.997 0.268 28.59
ANISOU  16   OD2 AASP 2    1619    2901    6341    790   -1022  -253
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ATOM    18   CA  BMET 1   31.874  13.050  57.425 0.458 40.62
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ATOM    19   C   BMET 1   30.884  14.113  57.894 0.458 38.21
ANISOU  19   C   BMET 1    5082    3637    5797    282   -909  -915
ATOM    20   O   BMET 1   30.075  14.599  57.110 0.458 44.81
ANISOU  20   O   BMET 1    8292    3208    5525    2071  -656  - 1 2
ATOM    21   CB  BMET 1   31.131  11.857  56.829 0.458 33.14
ANISOU  21   CB  BMET 1    4866    2613    5114    2013  -122 8 1 8
ATOM    22   CG  BMET 1   29.625  11.840  56.968 0.458 40.28
ANISOU  22   CG  BMET 1    4795    5740    4768    230   -751 5 3
ATOM    23   SD  BMET 1   28.761  11.495  55.422 0.458 34.23
ANISOU  23   SD  BMET 1    5619    3819    3566    2050  -215 2 0
ATOM    24   CE  BMET 1   29.953  12.079  54.222 0.458 54.24
ANISOU  24   CE  BMET 1    10672   4519    5420    1149  4083  -2463
ATOM    25   N   BASP 2   30.914  14.381  59.194 0.732 37.72
ANISOU  25   N   BASP 2    4433    3914    5984   -1323 -1208  -1385
ATOM    26   CA  BASP 2   29.979  15.308  59.811 0.732 35.78
ANISOU  26   CA  BASP 2    5412    3387    4794   -1064 -1050  - 795
ATOM    27   C   BASP 2   28.536  14.886  59.567 0.732 29.66
ANISOU  27   C   BASP 2    4876    1624    4771    27 -1561 1 2 1 8
ATOM    28   O   BASP 2   28.181  14.602  58.414 0.732 34.65
ANISOU  28   O   BASP 2    4375    3689    5100    65 -1485 2 4 7
ATOM    29   CB  BASP 2   30.195  16.696  59.181 0.732 37.39
ANISOU  29   CB  BASP 2    6632    3351    4222   -1850 869  -1518
ATOM    30   CG  BASP 2   29.562  17.730  60.104 0.732 30.38
ANISOU  30   CG  BASP 2    3243    3791    4510   -500  -606  -1191
ATOM    31   OD1 BASP 2   28.866  17.247  61.030 0.732 48.88
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ANISOU   31  OD1 BASP   2     6276   4203   8095  -1203  3147  -1901
ATOM     32  OD2 BASP   2    29.760 18.945 59.875  0.732 34.85
ANISOU   32  OD2 BASP   2     2852   3708   6680   -491   444  -1450
ATOM     33  N   THR    3    27.717 14.789 60.606  1.000 35.58
ANISOU   33  N   THR    3     4586   4123   4811    601  -1628  1516
ATOM     34  CA  THR    3    26.303 14.433 60.495  1.000 40.48
ANISOU   34  CA  THR    3     4650   4555   6175    371   -911  -385
ATOM     35  C   THR    3    25.382 15.647 60.611  1.000 39.82
ANISOU   35  C   THR    3     4376   4155   6598    320  -3864  -586
ATOM     36  O   THR    3    24.150 15.556 60.751  1.000 33.55
ANISOU   36  O   THR    3     4668   3107   4972    357  -2748  -588
ATOM     37  CB  THR    3    25.905 13.450 61.613  1.000 39.95
ANISOU   37  CB  THR    3     3787   4004   7387    160  -1209   6   2
ATOM     38  OG1 THR    3    26.591 13.851 62.817  1.000 61.83
ANISOU   38  OG1 THR    3    10134   5882   7476  -4164 -3020  2051
ATOM     39  CG2 THR    3    26.399 12.052 61.278  1.000 59.32
ANISOU   39  CG2 THR    3     4613   3971  13955   1114  -3135  -198
ATOM     40  N   THR    4    26.036 16.780 60.456  1.000 32.55
ANISOU   40  N   THR    4     4306   4611   3450    377  -2166  -217
ATOM     41  CA  THR    4    25.439 18.092 60.393  1.000 31.22
ANISOU   41  CA  THR    4     4275   4229   3358    -81  -1179   9   5
ATOM     42  C   THR    4    24.672 18.272 59.090  1.000 30.06
ANISOU   42  C   THR    4     4876   3341   3207    773  -1156  -204
ATOM     43  O   THR    4    25.195 17.935 58.017  1.000 31.64
ANISOU   43  O   THR    4     4877   3780   3363   1935  -1255   -52
ATOM     44  CB  THR    4    26.510 19.208 60.407  1.000 32.31
ANISOU   44  CB  THR    4     2320   4762   5194    475   -547  593
ATOM     45  OG1 THR    4    27.324 19.091 61.578  1.000 32.36
ANISOU   45  OG1 THR    4     3705   3955   4635   -79   -797  -389
ATOM     46  CG2 THR    4    25.852 20.582 60.458  1.000 27.22
ANISOU   46  CG2 THR    4     3728   4174   2443    71  304  -151
ATOM     47  N   VAL    5    23.464 18.796 59.211  1.000 21.69
ANISOU   47  N   VAL    5     4041   1985   2215   -543   -657  158
ATOM     48  CA  VAL    5    22.690 19.140 58.024  1.000 20.42
ANISOU   48  CA  VAL    5     3675   1964   2120   -622   -517  103
ATOM     49  C   VAL    5    23.199 20.489 57.499  1.000 17.01
ANISOU   49  C   VAL    5     2263   1803   2396   -279   -622   8   9
ATOM     50  O   VAL    5    23.156 21.449 58.252  1.000 21.10
ANISOU   50  O   VAL    5     3662   1885   2472   -389   -656   1   6
ATOM     51  CB  VAL    5    21.204 19.216 58.402  1.000 24.22
ANISOU   51  CB  VAL    5     3551   2155   3495  -1045  -396  783
ATOM     52  CG1 VAL    5    20.434 19.700 57.166  1.000 20.14
ANISOU   52  CG1 VAL    5     3202   1779   2672   -453    10  -226
ATOM     53  CG2 VAL    5    20.701 17.867 58.860  1.000 28.58
ANISOU   53  CG2 VAL    5     5258   2086   3516  -1226  431   510
ATOM     54  N   PRO    6    23.750 20.542 56.300  1.000 16.95
ANISOU   54  N   PRO    6     2378   1629   2434    29  -594   301
ATOM     55  CA  PRO    6    24.354 21.793 55.857  1.000 16.90
ANISOU   55  CA  PRO    6     1645   1775   3000     6  -445   303
ATOM     56  C   PRO    6    23.298 22.800 55.383  1.000 15.61
ANISOU   56  C   PRO    6     1477   1766   2687   -192  -437  545
ATOM     57  O   PRO    6    22.133 22.432 55.201  1.000 15.75
ANISOU   57  O   PRO    6     1578   1761   2647   -260  -579   5   5
ATOM     58  CB  PRO    6    25.216 21.375 54.682  1.000 19.85
ANISOU   58  CB  PRO    6     2320   1752   3468    50   70  182
ATOM     59  CG  PRO    6    24.632 20.095 54.187  1.000 24.76
ANISOU   59  CG  PRO    6     3550   2953   2904  -1186  300   -286
ATOM     60  CD  PRO    6    23.926 19.428 55.357  1.000 17.91
ANISOU   60  CD  PRO    6     1960   1962   2882   -168  -138  -44
ATOM     61  N   THR    7    23.723 24.031 55.156  1.000 14.38
ANISOU   61  N   THR    7     1518   1567   2378   -158  -616  100
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ATOM     62  CA  THR   7      22.907  25.103  54.610 1.000 14.09
ANISOU   62  CA  THR   7      1625    1554    2174    -255  -581 2 2 8
ATOM     63  C   THR   7      23.605  25.684  53.374 1.000 14.74
ANISOU   63  C   THR   7      1683    1849    2067    -193  -468 1 2 1
ATOM     64  O   THR   7      24.828  25.894  53.423 1.000 15.95
ANISOU   64  O   THR   7      1752    2137    2171    -378  -457 1 8 5
ATOM     65  CB  THR   7      22.795  26.248  55.637 1.000 15.25
ANISOU   65  CB  THR   7      1548    1846    2401    56 -124  5 2
ATOM     66  OG1 THR   7      22.208  25.717  56.829 1.000 16.91
ANISOU   66  OG1 THR   7      1818    2149    2458    -402  -183 4 7
ATOM     67  CG2 THR   7      21.952  27.387  55.040 1.000 16.09
ANISOU   67  CG2 THR   7      1651    1613    2848    -138  -263 - 2 5
ATOM     68  N   PHE   8      22.830  25.892  52.325 1.000 15.06
ANISOU   68  N   PHE   8      1966    1618    2137    -411  -558 2 3 0
ATOM     69  CA  PHE   8      23.317  26.545  51.136 1.000 14.76
ANISOU   69  CA  PHE   8      1857    1558    2192    -213  -411 2 8 1
ATOM     70  C   PHE   8      22.421  27.728  50.810 1.000 14.94
ANISOU   70  C   PHE   8      1907    1421    2347    -275  -357 1 8 1
ATOM     71  O   PHE   8      21.198  27.678  50.995 1.000 16.40
ANISOU   71  O   PHE   8      1782    1642    2808    -197  -550 3 4
ATOM     72  CB  PHE   8      23.242  25.562  49.948 1.000 16.49
ANISOU   72  CB  PHE   8      2123    1854    2287    49 -371  - 1
ATOM     73  CG  PHE   8      24.225  24.432  50.027 1.000 14.92
ANISOU   73  CG  PHE   8      1710    1824    2135    -197  -365 1 6 3
ATOM     74  CD1 PHE   8      23.822  23.227  50.600 1.000 16.78
ANISOU   74  CD1 PHE   8      1808    1726    2842    -300  -358 1 8 4
ATOM     75  CD2 PHE   8      25.539  24.558  49.602 1.000 16.67
ANISOU   75  CD2 PHE   8      1705    2130    2500    -310  -361 3 2 1
ATOM     76  CE1 PHE   8      24.702  22.183  50.742 1.000 16.74
ANISOU   76  CE1 PHE   8      2035    1966    2359    -4 -99 2 9 5
ATOM     77  CE2 PHE   8      26.420  23.525  49.773 1.000 19.18
ANISOU   77  CE2 PHE   8      1398    2153    3736    -408  -631 1 8 7
ATOM     78  CZ  PHE   8      26.026  22.336  50.351 1.000 17.90
ANISOU   78  CZ  PHE   8      1849    2003    2948    -119  -376 2 0
ATOM     79  N   SER   9      23.023  28.776  50.314 1.000 14.82
ANISOU   79  N   SER   9      2134    1488    2008    -351  -528 3 1 0
ATOM     80  CA  SER   9      22.338  29.902  49.715 1.000 15.12
ANISOU   80  CA  SER   9      2037    1259    2449    -357  -571 1 3 4
ATOM     81  C   SER   9      21.977  29.607  48.270 1.000 16.19
ANISOU   81  C   SER   9      2138    1791    2224    -374  -535 5 4 7
ATOM     82  O   SER   9      22.877  29.312  47.473 1.000 17.04
ANISOU   82  O   SER   9      2191    1892    2393    -423  -544 2 3 2
ATOM     83  CB  SER   9      23.306  31.113  49.696 1.000 18.74
ANISOU   83  CB  SER   9      2891    1712    2519   -1012  -478 7 1 7
ATOM     84  OG  SER   9      22.738  32.131  48.853 1.000 20.82
ANISOU   84  OG  SER   9      2866    1569    3477    -662  -854 6 0 7
ATOM     85  N   LEU  10      20.697  29.674  47.924 1.000 16.46
ANISOU   85  N   LEU  10      2215    1495    2542    -228  -740 - 4 8
ATOM     86  CA  LEU  10      20.345  29.401  46.529 1.000 17.55
ANISOU   86  CA  LEU  10      2263    1856    2551    -582  -694 3 6
ATOM     87  C   LEU  10      21.079  30.373  45.591 1.000 18.84
ANISOU   87  C   LEU  10      2506    1870    2784    -596  -830 3 5 7
ATOM     88  O   LEU  10      21.573  30.025  44.520 1.000 20.19
ANISOU   88  O   LEU  10      2705    2263    2704    -524  -663 5 0 8
ATOM     89  CB  LEU  10      18.844  29.559  46.327 1.000 18.87
ANISOU   89  CB  LEU  10      2302    2516    2354    -288  -715 2 8 0
ATOM     90  CG  LEU  10      18.355  29.333  44.895 1.000 18.28
ANISOU   90  CG  LEU  10      2182    2172    2591    -668  -677 - 3 0 1
ATOM     91  CD1 LEU  10      18.708  27.955  44.397 1.000 22.45
ANISOU   91  CD1 LEU  10      3418    2024    3089    -308  -537 1 7
ATOM     92  CD2 LEU  10      16.852  29.603  44.869 1.000 21.93
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ANISOU   92  CD2 LEU  10   2250   2658   3424   -504  -1139   7   5
ATOM     93  N   ALA  11  21.154 31.638 46.037 1.000 20.05
ANISOU   93  N   ALA  11   2862   1780   2977   -595  -1279   4   7   2
ATOM     94  CA  ALA  11  21.810 32.647 45.202 1.000 24.24
ANISOU   94  CA  ALA  11   3160   1670   4380   -455  -979   8   9   1
ATOM     95  C   ALA  11  23.285 32.309 44.946 1.000 21.06
ANISOU   95  C   ALA  11   3128   1937   2937   -644  -1016   4   3   1
ATOM     96  O   ALA  11  23.819 32.447 43.829 1.000 26.29
ANISOU   96  O   ALA  11   3569   3261   3158  -1628  -923   1   1   3   7
ATOM     97  CB  ALA  11  21.752 33.989 45.953 1.000 24.29
ANISOU   97  CB  ALA  11   3740   1692   3797   -461  -216   9   9   6
ATOM     98  N   GLU  12  23.953 31.844 46.005 1.000 20.65
ANISOU   98  N   GLU  12   2829   1975   3044   -828  -930   6   7   4
ATOM     99  CA  GLU  12  25.354 31.463 45.862 1.000 21.19
ANISOU   99  CA  GLU  12   3036   2400   2615   -506  -715   5   9   8
ATOM    100  C   GLU  12  25.483 30.277 44.920 1.000 21.56
ANISOU  100  C   GLU  12   3894   2179   2117   -702  -206   9   8   8
ATOM    101  O   GLU  12  26.375 30.215 44.069 1.000 21.98
ANISOU  101  O   GLU  12   3463   2917   1971  -1144  -488   6   1   8
ATOM    102  CB  GLU  12  26.032 31.170 47.204 1.000 20.27
ANISOU  102  CB  GLU  12   2874   2192   2636   -221  -624   5   0   1
ATOM    103  CG  GLU  12  26.156 32.451 48.032 1.000 20.54
ANISOU  103  CG  GLU  12   2889   2316   2598   -344  -516   4   0   6
ATOM    104  CD  GLU  12  26.787 32.279 49.389 1.000 21.86
ANISOU  104  CD  GLU  12   3146   2542   2619  -1297  -612   7   9   9
ATOM    105  OE1 GLU  12  27.068 31.149 49.803 1.000 24.98
ANISOU  105  OE1 GLU  12   3642   2681   3169  -1348 -1088   1   1   3   4
ATOM    106  OE2 GLU  12  26.819 33.305 50.092 1.000 33.52
ANISOU  106  OE2 GLU  12   5881   2966   3888  -1119  -2251   4   6
ATOM    107  N   LEU  13  24.600 29.295 45.060 1.000 18.91
ANISOU  107  N   LEU  13   2567   2345   2275   -351  -390   3   8   2
ATOM    108  CA  LEU  13  24.645 28.117 44.174 1.000 18.61
ANISOU  108  CA  LEU  13   2575   2347   2149   -209   270   4   0   6
ATOM    109  C   LEU  13  24.432 28.566 42.738 1.000 21.40
ANISOU  109  C   LEU  13   3558   2367   2206   -709   -41   5   2   6
ATOM    110  O   LEU  13  25.102 28.095 41.824 1.000 23.75
ANISOU  110  O   LEU  13   3827   3216   1981   -823  -117   1   9   0
ATOM    111  CB  LEU  13  23.541 27.137 44.562 1.000 18.97
ANISOU  111  CB  LEU  13   2982   2243   1984   -462  -145   4   4   0
ATOM    112  CG  LEU  13  23.773 26.344 45.860 1.000 18.57
ANISOU  112  CG  LEU  13   2313   2322   2422   -467  -362   7   4   5
ATOM    113  CD1 LEU  13  22.526 25.480 46.070 1.000 20.74
ANISOU  113  CD1 LEU  13   2769   2266   2845   -789  -142   5   9   4
ATOM    114  CD2 LEU  13  25.023 25.473 45.858 1.000 19.80
ANISOU  114  CD2 LEU  13   2709   2229   2585   -244  -509  -1   0   7
ATOM    115  N   GLN  14  23.544 29.508 42.478 1.000 22.03
ANISOU  115  N   GLN  14   3596   2139   2635   -960  -903   3   7   9
ATOM    116  CA  GLN  14  23.284 29.978 41.104 1.000 23.79
ANISOU  116  CA  GLN  14   3010   3335   2694   -992  -816   6   4   8
ATOM    117  C   GLN  14  24.431 30.712 40.509 1.000 25.44
ANISOU  117  C   GLN  14   3360   3427   2881  -1070  -382   4   8   7
ATOM    118  O   GLN  14  24.655 30.829 39.288 1.000 30.04
ANISOU  118  O   GLN  14   3836   4657   2922  -1208  -427   8   9   8
ATOM    119  CB  GLN  14  22.064 30.906 41.131 1.000 26.28
ANISOU  119  CB  GLN  14   3133   3630   3222   -760  -863   9   3   8
ATOM    120  CG  GLN  14  20.772 30.111 41.355 1.000 23.26
ANISOU  120  CG  GLN  14   3106   2319   3413   -299  -577   5   1   4
ATOM    121  CD  GLN  14  19.586 31.020 41.631 1.000 23.69
ANISOU  121  CD  GLN  14   3384   2462   3155   -317  -393  -1   9   6
ATOM    122  OE1 GLN  14  19.734 32.104 42.160 1.000 28.34
ANISOU  122  OE1 GLN  14   4973   2619   3175   -183  -732  -4   0   8
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ATOM	123	NE2	GLN	14	18.398	30.513	41.349	1.000	23.60	
ANISOU	123	NE2	GLN	14	3058	2969	2941	-383	54	245
ATOM	124	N	GLN	15	25.309	31.243	41.395	1.000	25.00	
ANISOU	124	N	GLN	15	3078	3281	3140	-1159	-394	575
ATOM	125	CA	GLN	15	26.530	31.936	40.945	1.000	24.05	
ANISOU	125	CA	GLN	15	2947	3560	2631	-866	-98	655
ATOM	126	C	GLN	15	27.650	30.920	40.707	1.000	26.06	
ANISOU	126	C	GLN	15	3810	3951	2139	-345	406	668
ATOM	127	O	GLN	15	28.756	31.284	40.302	1.000	35.85	
ANISOU	127	O	GLN	15	4294	4851	4476	102	1871	1192
ATOM	128	CB	GLN	15	27.018	32.918	42.009	1.000	25.90	
ANISOU	128	CB	GLN	15	3055	3037	3748	-1092	-109	364
ATOM	129	CG	GLN	15	26.103	34.092	42.219	1.000	31.24	
ANISOU	129	CG	GLN	15	4562	2577	4731	-806	962	1054
ATOM	130	CD	GLN	15	26.503	35.022	43.348	1.000	59.75	
ANISOU	130	CD	GLN	15	9927	2475	10301	-1855	-14	-1904
ATOM	131	OE1	GLN	15	27.634	35.031	43.840	1.000	81.81	
ANISOU	131	OE1	GLN	15	15059	3931	12094	-944	-6272	-1803
ATOM	132	NE2	GLN	15	25.539	35.841	43.767	1.000	91.46	
ANISOU	132	NE2	GLN	15	14070	4846	15833	-923	3672	-4850
ATOM	133	N	GLY	16	27.379	29.643	40.969	1.000	29.90	
ANISOU	133	N	GLY	16	4634	3820	2907	-239	22	787
ATOM	134	CA	GLY	16	28.410	28.649	40.699	1.000	28.76	
ANISOU	134	CA	GLY	16	4466	3629	2833	-709	461	250
ATOM	135	C	GLY	16	29.339	28.473	41.878	1.000	27.60	
ANISOU	135	C	GLY	16	3816	3779	2891	-616	914	1485
ATOM	136	O	GLY	16	30.398	27.867	41.725	1.000	31.47	
ANISOU	136	O	GLY	16	3386	4758	3814	-899	1243	1023
ATOM	137	N	LEU	17	28.960	28.898	43.083	1.000	26.01	
ANISOU	137	N	LEU	17	3295	3636	2950	-721	162	743
ATOM	138	CA	LEU	17	29.776	28.666	44.257	1.000	23.96	
ANISOU	138	CA	LEU	17	2700	3032	3372	-601	100	673
ATOM	139	C	LEU	17	29.462	27.338	44.932	1.000	20.31	
ANISOU	139	C	LEU	17	2222	2763	2733	-252	611	261
ATOM	140	O	LEU	17	28.389	26.780	44.789	1.000	23.13	
ANISOU	140	O	LEU	17	2347	3134	3308	-443	263	859
ATOM	141	CB	LEU	17	29.645	29.806	45.286	1.000	25.94	
ANISOU	141	CB	LEU	17	2886	2933	4035	-1318	-405	254
ATOM	142	CG	LEU	17	29.962	31.209	44.716	1.000	31.57	
ANISOU	142	CG	LEU	17	3741	2948	5308	-523	1150	722
ATOM	143	CD1	LEU	17	29.550	32.358	45.615	1.000	32.04	
ANISOU	143	CD1	LEU	17	5221	2887	4066	-1269	278	508
ATOM	144	CD2	LEU	17	31.458	31.278	44.416	1.000	38.11	
ANISOU	144	CD2	LEU	17	3828	5491	5160	-2315	954	232
ATOM	145	N	HIS	18	30.441	26.822	45.681	1.000	22.49	
ANISOU	145	N	HIS	18	2600	3067	2877	-662	42	449
ATOM	146	CA	HIS	18	30.289	25.644	46.537	1.000	21.54	
ANISOU	146	CA	HIS	18	2378	2809	2996	-432	201	313
ATOM	147	C	HIS	18	29.908	24.376	45.790	1.000	22.76	
ANISOU	147	C	HIS	18	2256	3245	3148	-1009	282	114
ATOM	148	O	HIS	18	29.147	23.565	46.331	1.000	22.60	
ANISOU	148	O	HIS	18	2008	3064	3516	-629	-166	884
ATOM	149	CB	HIS	18	29.224	25.872	47.618	1.000	22.81	
ANISOU	149	CB	HIS	18	2514	2879	3272	-526	450	421
ATOM	150	CG	HIS	18	29.320	27.248	48.217	1.000	21.70	
ANISOU	150	CG	HIS	18	2797	3038	2411	-149	39	503
ATOM	151	ND1	HIS	18	30.438	27.773	48.807	1.000	25.01	
ANISOU	151	ND1	HIS	18	3714	3505	2284	-207	-629	149
ATOM	152	CD2	HIS	18	28.370	28.216	48.269	1.000	24.95	
ANISOU	152	CD2	HIS	18	3244	3278	2957	87	544	275
ATOM	153	CE1	HIS	18	30.197	28.982	49.223	1.000	29.26	

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ANISOU  153  CE1 HIS  18   4603     3396     3118    -388   -335  2  7
ATOM    154  NE2 HIS  18     28.937   29.271   48.919  1.000 27.24
ANISOU  154  NE2 HIS  18   4582     3137     2632       2   224  3  6  5
ATOM    155  N   GLN  19     30.269   24.270   44.521  1.000 22.74
ANISOU  155  N   GLN  19   2724     3094     2822    -511   -123  4  2  3
ATOM    156  CA  GLN  19     29.806   23.113   43.730  1.000 23.85
ANISOU  156  CA  GLN  19   3129     2668     3263     148     63  8  9
ATOM    157  C   GLN  19     30.271   21.760   44.221  1.000 22.77
ANISOU  157  C   GLN  19   2532     3026     3095    -502   -574  7  7  8
ATOM    158  O   GLN  19     29.480   20.801   44.259  1.000 21.99
ANISOU  158  O   GLN  19   1869     2911     3574    -187     0    5  5  8
ATOM    159  CB  GLN  19     30.227   23.322   42.276  1.000 27.66
ANISOU  159  CB  GLN  19   5043     2519     2947      29   -339    4  5  8
ATOM    160  CG  GLN  19     29.397   24.333   41.523  1.000 26.21
ANISOU  160  CG  GLN  19   3289     3163     3508     299     171    4  3  7
ATOM    161  CD  GLN  19     27.917   24.368   41.862  1.000 32.47
ANISOU  161  CD  GLN  19   3403     4411     4521    -986     535    6  5  4
ATOM    162  OE1 GLN  19     27.154   23.604   41.277  1.000 39.69
ANISOU  162  OE1 GLN  19   3996     4238     6845    -262   -2770    1  8  2  9
ATOM    163  NE2 GLN  19     27.511   25.212   42.811  1.000 42.55
ANISOU  163  NE2 GLN  19   3803     6153     6212      81    1944    1  1
ATOM    164  N   ASP  20     31.526   21.572   44.631  1.000 22.63
ANISOU  164  N   ASP  20   2073     3400     3123    -414     95  7  0  8
ATOM    165  CA  ASP  20     31.926   20.292   45.225  1.000 23.10
ANISOU  165  CA  ASP  20   1869     3674     3235      83    236  7  0  4
ATOM    166  C   ASP  20     31.190   20.042   46.546  1.000 20.03
ANISOU  166  C   ASP  20   1775     2963     2873    -280   -143  4  9  3
ATOM    167  O   ASP  20     30.772   18.899   46.768  1.000 21.48
ANISOU  167  O   ASP  20   1429     2884     3848    -311     225    2  2  4
ATOM    168  CB  ASP  20     33.414   20.268   45.521  1.000 27.66
ANISOU  168  CB  ASP  20   1835     4546     4130     -16     207    8  8  1
ATOM    169  CG  ASP  20     34.298   20.206   44.291  1.000 39.35
ANISOU  169  CG  ASP  20   2355     6893     5705    -654    1323   -1  9  1  5
ATOM    170  OD1 ASP  20     33.870   19.914   43.153  1.000 35.78
ANISOU  170  OD1 ASP  20   3152     5452     4992    -741    1508   -7  9  7
ATOM    171  OD2 ASP  20     35.508   20.433   44.467  1.000 45.22
ANISOU  171  OD2 ASP  20   2201     8705     6277    -589    1088   -8  7
ATOM    172  N   GLU  21     31.046   21.053   47.404  1.000 20.01
ANISOU  172  N   GLU  21   1574     2935     3093    -412   -241  3  6  7
ATOM    173  CA  GLU  21     30.323   20.811   48.665  1.000 18.97
ANISOU  173  CA  GLU  21   1412     2956     2838    -481   -464  1  1  8
ATOM    174  C   GLU  21     28.858   20.448   48.402  1.000 17.84
ANISOU  174  C   GLU  21   1386     2342     3050    -307   -395  2  3  4
ATOM    175  O   GLU  21     28.290   19.602   49.054  1.000 18.46
ANISOU  175  O   GLU  21   1671     2286     3057    -419   -351  1  1  6
ATOM    176  CB  GLU  21     30.415   22.058   49.563  1.000 20.10
ANISOU  176  CB  GLU  21   1646     2821     3170    -514   -499  1  2  7
ATOM    177  CG  GLU  21     31.893   22.322   49.918  1.000 24.11
ANISOU  177  CG  GLU  21   1682     3568     3912    -766   -326   -7  1  1
ATOM    178  CD  GLU  21     32.574   23.380   49.081  1.000 29.70
ANISOU  178  CD  GLU  21   1330     4241     5713    -752   -666  5  2  1
ATOM    179  OE1 GLU  21     32.249   23.594   47.887  1.000 35.14
ANISOU  179  OE1 GLU  21   2623     4054     6677   -1336  -1741    1  9  7  7
ATOM    180  OE2 GLU  21     33.483   24.007   49.678  1.000 39.39
ANISOU  180  OE2 GLU  21   3681     4425     6860   -2089  -1618    6  4  7
ATOM    181  N   PHE  22     28.231   21.048   47.395  1.000 17.30
ANISOU  181  N   PHE  22   1540     2352     2680    -243   -446   -7  9
ATOM    182  CA  PHE  22     26.851   20.761   47.071  1.000 17.13
ANISOU  182  CA  PHE  22   1534     2166     2807    -235   -396  3  7  4
ATOM    183  C   PHE  22     26.733   19.329   46.552  1.000 17.41
ANISOU  183  C   PHE  22   1688     2500     2427    -502   -334  1  0  4
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ATOM    184  O   PHE  22   25.867  18.574  46.995 1.000 15.87
ANISOU  184  O   PHE  22   1570    2118    2343    -249  -361 1 3 1
ATOM    185  CB  PHE  22   26.305  21.840  46.149 1.000 18.00
ANISOU  185  CB  PHE  22   1747    2754    2337    70 -178  4 4 5
ATOM    186  CG  PHE  22   24.802  21.729  45.930 1.000 16.38
ANISOU  186  CG  PHE  22   1763    1748    2714    -90   -326 2 2 3
ATOM    187  CD1 PHE  22   23.934  21.723  47.003 1.000 18.29
ANISOU  187  CD1 PHE  22   1812    2091    3045    -197  -88  5 7 6
ATOM    188  CD2 PHE  22   24.290  21.720  44.641 1.000 18.62
ANISOU  188  CD2 PHE  22   2106    2079    2890    -143  -623 3 9 4
ATOM    189  CE1 PHE  22   22.569  21.727  46.771 1.000 18.90
ANISOU  189  CE1 PHE  22   1826    2086    3271    -198  -133 3 0 2
ATOM    190  CE2 PHE  22   22.911  21.660  44.379 1.000 19.28
ANISOU  190  CE2 PHE  22   2189    2023    3114    -242  -754 -1 4 4
ATOM    191  CZ  PHE  22   22.059  21.645  45.473 1.000 19.42
ANISOU  191  CZ  PHE  22   2048    1723    3607    90 -483  -3 7 6
ATOM    192  N   ARG  23   27.580  18.971  45.583 1.000 17.88
ANISOU  192  N   ARG  23   1647    2437    2709    -168  -218 3 1 7
ATOM    193  CA  ARG  23   27.520  17.594  45.079 1.000 19.18
ANISOU  193  CA  ARG  23   1724    2539    3022    -166  36 1 5 8
ATOM    194  C   ARG  23   27.767  16.595  46.211 1.000 19.11
ANISOU  194  C   ARG  23   1279    2461    3518    -173  -113 4 5 5
ATOM    195  O   ARG  23   27.107  15.547  46.229 1.000 18.82
ANISOU  195  O   ARG  23   1614    2156    3381    -33   181  -1 2 8
ATOM    196  CB  ARG  23   28.605  17.351  44.030 1.000 22.81
ANISOU  196  CB  ARG  23   1934    4099    2633    -34   -105 -3 5 4
ATOM    197  CG  ARG  23   28.248  17.790  42.617 1.000 24.82
ANISOU  197  CG  ARG  23   2601    4078    2752    191   -122 -2 0 4
ATOM    198  CD  ARG  23   29.376  17.272  41.685 1.000 29.71
ANISOU  198  CD  ARG  23   2503    5619    3168    -285  908  7 0 4
ATOM    199  NE  ARG  23   30.479  18.206  41.800 1.000 30.96
ANISOU  199  NE  ARG  23   2877    5034    3851    -43   286  2 9 7
ATOM    200  CZ  ARG  23   30.549  19.360  41.148 1.000 29.49
ANISOU  200  CZ  ARG  23   2612    5063    3529    -225  606  1 7 7
ATOM    201  NH1 ARG  23   29.536  19.665  40.328 1.000 29.26
ANISOU  201  NH1 ARG  23   3242    4951    2923    -960  331  5 2 5
ATOM    202  NH2 ARG  23   31.629  20.092  41.345 1.000 32.61
ANISOU  202  NH2 ARG  23   2320    5347    4722    -134  519  1 7 9
ATOM    203  N   ARG  24   28.708  16.851  47.125 1.000 17.80
ANISOU  203  N   ARG  24   1262    2168    3332    183   38 9 8
ATOM    204  CA  ARG  24   28.930  15.899  48.222 1.000 18.85
ANISOU  204  CA  ARG  24   1368    2509    3287    69 -162  1 0 5
ATOM    205  C   ARG  24   27.701  15.811  49.114 1.000 17.51
ANISOU  205  C   ARG  24   1456    2015    3181    132   -177 2 4 3
ATOM    206  O   ARG  24   27.333  14.733  49.544 1.000 17.93
ANISOU  206  O   ARG  24   1851    1965    2997    -16   -402 2 5 3
ATOM    207  CB  ARG  24   30.203  16.321  48.991 1.000 19.88
ANISOU  207  CB  ARG  24   1685    2700    3169    -398  -218 4 4
ATOM    208  CG  ARG  24   31.459  16.053  48.135 1.000 29.07
ANISOU  208  CG  ARG  24   1467    4625    4954    269   203  7 0 9
ATOM    209  CD  ARG  24   32.700  16.206  49.016 1.000 41.84
ANISOU  209  CD  ARG  24   1745    7021    7130    -451  -494 -9 2 2
ATOM    210  NE  ARG  24   33.690  17.103  48.464 1.000 57.06
ANISOU  210  NE  ARG  24   4362    9316    8003    -3326 -669 -1 1 4 1
ATOM    211  CZ  ARG  24   34.032  18.327  48.810 1.000 60.67
ANISOU  211  CZ  ARG  24   5961    10369   6723    -4627 -1324  -1 5 8 6
ATOM    212  NH1 ARG  24   33.430  18.980  49.799 1.000 49.70
ANISOU  212  NH1 ARG  24   7748    6565.   4569    -951  -2185  2 2 2 6
ATOM    213  NH2 ARG  24   34.997  18.971  48.159 1.000 54.12
ANISOU  213  NH2 ARG  24   8696    8490    3378    -3780 -2352  1 6 0 7
ATOM    214  N   CYS  25   27.092  16.963  49.370 1.000 15.74
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ANISOU  214  N   CYS  25   1435   1969   2574   -16   -393  -33
ATOM    215  CA  CYS  25   25.884 16.921 50.223 1.000 16.39
ANISOU  215  CA  CYS  25   1518   1954   2756   -95   -317  -300
ATOM    216  C   CYS  25   24.826 16.068 49.547 1.000 15.73
ANISOU  216  C   CYS  25   1629   1699   2648   -114  -432   66
ATOM    217  O   CYS  25   24.124 15.262 50.155 1.000 15.89
ANISOU  217  O   CYS  25   1453   1801   2783   -88   -469  252
ATOM    218  CB  CYS  25   25.367 18.362 50.424 1.000 15.93
ANISOU  218  CB  CYS  25   1644   1779   2629   -49   -261  -30
ATOM    219  SG  CYS  25   23.700 18.417 51.184 1.000 17.82
ANISOU  219  SG  CYS  25   1742   1825   3202   -122   -33   -55
ATOM    220  N   LEU  26   24.623 16.308 48.250 1.000 15.25
ANISOU  220  N   LEU  26   1449   1843   2504   -54   -263  -142
ATOM    221  CA  LEU  26   23.560 15.590 47.534 1.000 15.62
ANISOU  221  CA  LEU  26   1616   1739   2580   -86   -453   4   8
ATOM    222  C   LEU  26   23.763 14.085 47.621 1.000 15.18
ANISOU  222  C   LEU  26   1697   1764   2306   -113  -479   6
ATOM    223  O   LEU  26   22.819 13.345 47.771 1.000 16.96
ANISOU  223  O   LEU  26   1797   1725   2920   -234  -664  -300
ATOM    224  CB  LEU  26   23.526 16.068 46.066 1.000 16.02
ANISOU  224  CB  LEU  26   1811   1645   2633   -191  -483  122
ATOM    225  CG  LEU  26   23.057 17.510 45.864 1.000 15.69
ANISOU  225  CG  LEU  26   1762   1716   2485    -6  -15   7   9
ATOM    226  CD1 LEU  26   23.252 17.880 44.405 1.000 17.48
ANISOU  226  CD1 LEU  26   1750   2360   2532   -17   -130  465
ATOM    227  CD2 LEU  26   21.584 17.680 46.290 1.000 17.11
ANISOU  227  CD2 LEU  26   1655   2188   2660   -29   -75   168
ATOM    228  N   ARG  27   25.027 13.648 47.494 1.000 17.26
ANISOU  228  N   ARG  27   1870   1818   2871   155   -326  140
ATOM    229  CA  ARG  27   25.295 12.205 47.372 1.000 18.75
ANISOU  229  CA  ARG  27   2108   1845   3170   270   -955  102
ATOM    230  C   ARG  27   25.240 11.599 48.744 1.000 17.95
ANISOU  230  C   ARG  27   1667   1801   3351   159   -897  219
ATOM    231  O   ARG  27   24.777 10.454 48.913 1.000 20.99
ANISOU  231  O   ARG  27   2158   1793   4026   -43   -360  168
ATOM    232  CB  ARG  27   26.641 12.008 46.670 1.000 21.35
ANISOU  232  CB  ARG  27   2815   2034   3264   622   -377  -129
ATOM    233  N   ASP  28   25.827 12.293 49.723 1.000 16.71
ANISOU  233  N   ASP  28   1487   2004   2856   178   -328   6   7
ATOM    234  CA  ASP  28   26.034 11.672 51.026 1.000 17.47
ANISOU  234  CA  ASP  28   1613   2095   2931   107   -301  127
ATOM    235  C   ASP  28   24.872 11.866 51.990 1.000 17.22
ANISOU  235  C   ASP  28   1414   2264   2863   223   -447  471
ATOM    236  O   ASP  28   24.816 11.081 52.937 1.000 17.62
ANISOU  236  O   ASP  28   1932   2139   2624   150   -565  327
ATOM    237  CB  ASP  28   27.306 12.237 51.657 1.000 22.17
ANISOU  237  CB  ASP  28   1581   3894   2948   -272  -467  559
ATOM    238  CG  ASP  28   28.590 11.906 50.941 1.000 24.72
ANISOU  238  CG  ASP  28   1596   3323   4472   236   -288  648
ATOM    239  OD1 ASP  28   28.572 10.905 50.199 1.000 27.56
ANISOU  239  OD1 ASP  28   2317   3071   5084   808   -284  572
ATOM    240  OD2 ASP  28   29.573 12.617 51.251 1.000 32.08
ANISOU  240  OD2 ASP  28   1584   4343   6261   -144  -470  416
ATOM    241  N   LYS  29   24.098 12.942 51.821 1.000 15.57
ANISOU  241  N   LYS  29   1475   1814   2627    5   -303   178
ATOM    242  CA  LYS  29   23.048 13.305 52.778 1.000 15.13
ANISOU  242  CA  LYS  29   1584   1999   2165   -68   -500  -96
ATOM    243  C   LYS  29   21.686 13.500 52.118 1.000 14.56
ANISOU  243  C   LYS  29   1496   1352   2686    77 -452   106
ATOM    244  O   LYS  29   20.688 12.985 52.635 1.000 16.21
ANISOU  244  O   LYS  29   1627   1876   2657   -177  -315   -5
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ATOM    245  CB  LYS  29   23.431  14.563  53.574 1.000 16.09
ANISOU  245  CB  LYS  29    1666    1672    2777    3   -642   -25
ATOM    246  CG  LYS  29   24.776  14.421  54.292 1.000 17.68
ANISOU  246  CG  LYS  29    2192    1918    2606    7  -1144  141
ATOM    247  CD  LYS  29   25.161  15.647  55.096 1.000 20.71
ANISOU  247  CD  LYS  29    2675    2044    3151   -35  -1518   4  1
ATOM    248  CE  LYS  29   26.498  15.331  55.844 1.000 22.24
ANISOU  248  CE  LYS  29    2203    2714    3535   142  -1369  -685
ATOM    249  NZ  LYS  29   26.955  16.594  56.492 1.000 32.67
ANISOU  249  NZ  LYS  29    3199    3381    5831  -502  -2085 -1260
ATOM    250  N   GLY  30   21.604  14.198  50.993 1.000 14.09
ANISOU  250  N   GLY  30    1552    1461    2340   135   -455  -100
ATOM    251  CA  GLY  30   20.358  14.373  50.250 1.000 14.09
ANISOU  251  CA  GLY  30    1428    1561    2365    92  -342   -97
ATOM    252  C   GLY  30   19.372  15.284  50.955 1.000 12.30
ANISOU  252  C   GLY  30    1423    1192    2059   -95   -275  9  4
ATOM    253  O   GLY  30   18.168  15.223  50.696 1.000 14.58
ANISOU  253  O   GLY  30    1435    1689    2415    52  -476   -121
ATOM    254  N   LEU  31   19.884  16.146  51.823 1.000 13.93
ANISOU  254  N   LEU  31    1472    1479    2343   -182  -248  -181
ATOM    255  CA  LEU  31   19.012  17.114  52.511 1.000 14.44
ANISOU  255  CA  LEU  31    1534    1457    2495   -235   -55   -246
ATOM    256  C   LEU  31   19.894  18.286  52.942 1.000 15.08
ANISOU  256  C   LEU  31    1411    1535    2784   -177  -326  -314
ATOM    257  O   LEU  31   21.113  18.136  53.140 1.000 15.64
ANISOU  257  O   LEU  31    1468    1664    2812   -169  -328   -67
ATOM    258  CB  LEU  31   18.222  16.560  53.694 1.000 16.76
ANISOU  258  CB  LEU  31    2192    1664    2511   -367   128   -213
ATOM    259  CG  LEU  31   18.883  16.517  55.039 1.000 20.16
ANISOU  259  CG  LEU  31    2435    2485    2739   -289  -141  445
ATOM    260  CD1 LEU  31   17.977  16.145  56.202 1.000 26.49
ANISOU  260  CD1 LEU  31    2253    5076    2738   -508  -341  969
ATOM    261  CD2 LEU  31   20.052  15.526  55.032 1.000 24.73
ANISOU  261  CD2 LEU  31    4192    2967    2237   1001   153   610
ATOM    262  N   PHE  32   19.289  19.462  53.052 1.000 14.11
ANISOU  262  N   PHE  32    1569    1457    2335   -231  -179  -207
ATOM    263  CA  PHE  32   20.020  20.697  53.417 1.000 13.56
ANISOU  263  CA  PHE  32    1447    1389    2317   -225  -137  1  4
ATOM    264  C   PHE  32   18.976  21.777  53.687 1.000 13.72
ANISOU  264  C   PHE  32    1411    1439    2365   -218  -421  -142
ATOM    265  O   PHE  32   17.889  21.711  53.118 1.000 15.50
ANISOU  265  O   PHE  32    1392    1862    2634   -175  -436  -389
ATOM    266  CB  PHE  32   20.958  21.157  52.308 1.000 15.01
ANISOU  266  CB  PHE  32    1379    2201    2125   -305  -342  231
ATOM    267  CG  PHE  32   20.381  21.156  50.920 1.000 14.60
ANISOU  267  CG  PHE  32    1649    1662    2237   -193  -429  118
ATOM    268  CD1 PHE  32   20.326  19.986  50.148 1.000 14.53
ANISOU  268  CD1 PHE  32    1328    1688    2504   -156  -507  1  5
ATOM    269  CD2 PHE  32   19.831  22.345  50.396 1.000 13.66
ANISOU  269  CD2 PHE  32    1320    1678    2191   -179  -309  166
ATOM    270  CE1 PHE  32   19.742  20.033  48.892 1.000 14.26
ANISOU  270  CE1 PHE  32    1507    1655    2256   -346  -271  199
ATOM    271  CE2 PHE  32   19.267  22.348  49.138 1.000 15.49
ANISOU  271  CE2 PHE  32    1681    1932    2272    72  -504   -126
ATOM    272  CZ  PHE  32   19.177  21.184  48.385 1.000 15.25
ANISOU  272  CZ  PHE  32    1979    1700    2117   -185  -295  168
ATOM    273  N   TYR  33   19.376  22.785  54.442 1.000 14.44
ANISOU  273  N   TYR  33    1813    1302    2372   -237  -496   -50
ATOM    274  CA  TYR  33   18.616  24.023  54.519 1.000 14.32
ANISOU  274  CA  TYR  33    1764    1415    2261   -143  -295  -111
ATOM    275  C   TYR  33   19.039  24.929  53.364 1.000 13.70
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ANISOU	275	C	TYR	33	1479	1565	2161	-79	-459	- 5
ATOM	276	O	TYR	33	20.158	24.871	52.859	1.000	15.28	
ANISOU	276	O	TYR	33	1370	1524	2912	-190	-420	2 6 3
ATOM	277	CB	TYR	33	18.874	24.734	55.853	1.000	14.47	
ANISOU	277	CB	TYR	33	1648	1717	2133	-197	-309	- 1 3 1
ATOM	278	CG	TYR	33	18.231	24.046	57.049	1.000	15.71	
ANISOU	278	CG	TYR	33	2131	1537	2302	-339	-109	- 1 3 6
ATOM	279	CD1	TYR	33	16.938	24.390	57.453	1.000	17.41	
ANISOU	279	CD1	TYR	33	2478	1967	2172	-154	246	- 2 4 9
ATOM	280	CD2	TYR	33	18.912	23.116	57.799	1.000	19.58	
ANISOU	280	CD2	TYR	33	2901	2070	2468	144	115	1 9 2
ATOM	281	CE1	TYR	33	16.354	23.758	58.542	1.000	20.18	
ANISOU	281	CE1	TYR	33	3138	1948	2581	26	740	- 1 0 2
ATOM	282	CE2	TYR	33	18.368	22.475	58.900	1.000	21.50	
ANISOU	282	CE2	TYR	33	3571	2480	2118	340	196	1 2 2
ATOM	283	CZ	TYR	33	17.081	22.821	59.263	1.000	22.02	
ANISOU	283	CZ	TYR	33	4140	1772	2454	471	1035	- 1 0 5
ATOM	284	OH	TYR	33	16.541	22.194	60.355	1.000	29.55	
ANISOU	284	OH	TYR	33	5088	2809	3329	377	1512	7 2 8
ATOM	285	N	LEU	34	18.076	25.709	52.878	1.000	14.28	
ANISOU	285	N	LEU	34	1496	1533	2396	-80	-517	- 1 7
ATOM	286	CA	LEU	34	18.278	26.620	51.756	1.000	15.02	
ANISOU	286	CA	LEU	34	1830	1452	2425	-126	-580	2 0
ATOM	287	C	LEU	34	17.871	28.039	52.151	1.000	14.46	
ANISOU	287	C	LEU	34	1703	1575	2217	-146	-241	- 7
ATOM	288	O	LEU	34	16.716	28.289	52.492	1.000	16.95	
ANISOU	288	O	LEU	34	1663	1852	2923	-75	-186	- 6 4
ATOM	289	CB	LEU	34	17.389	26.127	50.598	1.000	16.54	
ANISOU	289	CB	LEU	34	2355	1485	2444	-212	-749	2 5
ATOM	290	CG	LEU	34	17.633	26.800	49.249	1.000	15.65	
ANISOU	290	CG	LEU	34	2010	1567	2371	-7	-633	- 6 3
ATOM	291	CD1	LEU	34	18.977	26.422	48.664	1.000	20.14	
ANISOU	291	CD1	LEU	34	1919	2018	3717	-225	-171	2 6 0
ATOM	292	CD2	LEU	34	16.490	26.535	48.291	1.000	17.29	
ANISOU	292	CD2	LEU	34	2152	1824	2592	-425	-819	2 1 4
ATOM	293	N	THR	35	18.842	28.944	52.065	1.000	15.48	
ANISOU	293	N	THR	35	1817	1532	2534	-230	-200	1 3
ATOM	294	CA	THR	35	18.587	30.362	52.324	1.000	17.02	
ANISOU	294	CA	THR	35	2149	1537	2781	-206	-827	- 1 9 6
ATOM	295	C	THR	35	18.491	31.127	51.010	1.000	17.04	
ANISOU	295	C	THR	35	1895	1693	2887	-149	-882	- 4 4
ATOM	296	O	THR	35	18.765	30.572	49.938	1.000	17.01	
ANISOU	296	O	THR	35	1880	1692	2893	-262	-458	1 4 4
ATOM	297	CB	THR	35	19.772	30.917	53.180	1.000	17.79	
ANISOU	297	CB	THR	35	2018	1942	2800	-87	-854	- 2 0 0
ATOM	298	OG1	THR	35	20.986	30.673	52.474	1.000	21.10	
ANISOU	298	OG1	THR	35	2110	2035	3873	-253	-364	- 4 0 2
ATOM	299	CG2	THR	35	19.847	30.331	54.567	1.000	20.44	
ANISOU	299	CG2	THR	35	2600	2194	2971	228	-1113	5 9
ATOM	300	N	ASP	36	18.186	32.407	51.059	1.000	18.62	
ANISOU	300	N	ASP	36	2287	1747	3040	-187	-316	1 4 9
ATOM	301	CA	ASP	36	18.240	33.300	49.884	1.000	20.75	
ANISOU	301	CA	ASP	36	2678	1722	3483	-632	-508	3 7 4
ATOM	302	C	ASP	36	17.474	32.711	48.703	1.000	20.05	
ANISOU	302	C	ASP	36	2104	1929	3586	198	-928	4 8 9
ATOM	303	O	ASP	36	17.929	32.685	47.540	1.000	21.06	
ANISOU	303	O	ASP	36	2593	1749	3662	-496	-756	1 3 1
ATOM	304	CB	ASP	36	19.703	33.561	49.500	1.000	22.21	
ANISOU	304	CB	ASP	36	2666	2366	3406	-876	-755	8 0 7
ATOM	305	CG	ASP	36	20.588	34.192	50.551	1.000	23.05	
ANISOU	305	CG	ASP	36	2537	1818	4402	-175	-833	- 2 0 8

ATOM	306	OD1	ASP	36	20.061	34.886	51.457	1.000	26.16	
ANISOU	306	OD1	ASP	36	2981	2100	4860	378	-777	-381
ATOM	307	OD2	ASP	36	21.824	33.982	50.528	1.000	24.87	
ANISOU	307	OD2	ASP	36	2532	1994	4924	-49	-950	-628
ATOM	308	N	CYS	37	16.282	32.196	48.971	1.000	20.25	
ANISOU	308	N	CYS	37	2135	1711	3849	118	-638	-263
ATOM	309	CA	CYS	37	15.463	31.587	47.902	1.000	20.28	
ANISOU	309	CA	CYS	37	2390	1478	3839	136	-799	-138
ATOM	310	C	CYS	37	14.078	32.183	47.818	1.000	19.90	
ANISOU	310	C	CYS	37	2374	1724	3463	214	-711	-74
ATOM	311	O	CYS	37	13.176	31.629	47.156	1.000	22.75	
ANISOU	311	O	CYS	37	2569	1984	4091	-12	-1108	15
ATOM	312	CB	CYS	37	15.359	30.061	48.083	1.000	22.21	
ANISOU	312	CB	CYS	37	2739	1454	4247	194	-477	-115
ATOM	313	SG	CYS	37	14.500	29.595	49.596	1.000	22.84	
ANISOU	313	SG	CYS	37	2854	1884	3942	-203	-922	141
ATOM	314	N	GLY	38	13.855	33.390	48.314	1.000	20.85	
ANISOU	314	N	GLY	38	2353	1538	3933	217	-375	-42
ATOM	315	CA	GLY	38	12.570	34.044	48.194	1.000	23.42	
ANISOU	315	CA	GLY	38	2233	1874	4790	255	-292	165
ATOM	316	C	GLY	38	11.534	33.619	49.217	1.000	23.29	
ANISOU	316	C	GLY	38	2577	2045	4228	113	-136	-601
ATOM	317	O	GLY	38	10.400	34.091	49.129	1.000	25.58	
ANISOU	317	O	GLY	38	2529	3424	3765	214	-96	-264
ATOM	318	N	LEU	39	11.894	32.836	50.237	1.000	24.55	
ANISOU	318	N	LEU	39	2310	2980	4037	119	-46	-364
ATOM	319	CA	LEU	39	10.938	32.331	51.195	1.000	24.44	
ANISOU	319	CA	LEU	39	2637	2964	3684	-105	175	-946
ATOM	320	C	LEU	39	11.107	32.885	52.593	1.000	35.41	
ANISOU	320	C	LEU	39	5341	4215	3898	-796	165	-1435
ATOM	321	O	LEU	39	11.784	32.313	53.441	1.000	43.41	
ANISOU	321	O	LEU	39	7338	4986	4171	-2639	-1333	-303
ATOM	322	CB	LEU	39	10.850	30.810	51.206	1.000	26.48	
ANISOU	322	CB	LEU	39	4244	2940	2879	49	-70	-261
ATOM	323	CG	LEU	39	10.404	30.097	49.921	1.000	30.21	
ANISOU	323	CG	LEU	39	4834	2452	4195	258	-1618	-474
ATOM	324	CD1	LEU	39	10.683	28.595	49.972	1.000	24.78	
ANISOU	324	CD1	LEU	39	3351	2597	3468	424	-707	-118
ATOM	325	CD2	LEU	39	8.940	30.407	49.640	1.000	27.50	
ANISOU	325	CD2	LEU	39	4828	2118	3503	860	-860	-323
ATOM	326	N	THR	40	10.365	33.957	52.882	1.000	45.58	
ANISOU	326	N	THR	40	7392	4849	5077	-520	2852	-1993
ATOM	327	CA	THR	40	10.610	34.661	54.136	1.000	32.50	
ANISOU	327	CA	THR	40	4224	3732	4393	999	961	-558
ATOM	328	C	THR	40	9.700	34.177	55.248	1.000	29.68	
ANISOU	328	C	THR	40	3175	4204	3898	-116	294	-1630
ATOM	329	O	THR	40	8.653	33.556	55.031	1.000	39.75	
ANISOU	329	O	THR	40	3930	5847	5326	-1079	-301	-1653
ATOM	330	CB	THR	40	10.641	36.183	53.997	1.000	56.31	
ANISOU	330	CB	THR	40	10586	3758	7052	-1417	1006	-992
ATOM	331	OG1	THR	40	11.545	36.606	52.946	1.000	68.39	
ANISOU	331	OG1	THR	40	7379	3900	14707	-1978	3617	-246
ATOM	332	CG2	THR	40	11.214	36.837	55.256	1.000	70.22	
ANISOU	332	CG2	THR	40	8265	5228	13188	1389	-4422	-3241
ATOM	333	N	ASP	41	10.191	34.302	56.486	1.000	33.20	
ANISOU	333	N	ASP	41	3580	5223	3810	-203	307	-1779
ATOM	334	CA	ASP	41	9.329	33.943	57.613	1.000	27.51	
ANISOU	334	CA	ASP	41	2705	3858	3891	91	-253	-1061
ATOM	335	C	ASP	41	8.107	34.861	57.660	1.000	33.43	
ANISOU	335	C	ASP	41	3131	3064	6508	32	547	-1307
ATOM	336	O	ASP	41	7.034	34.469	58.101	1.000	30.76	

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ANISOU  336  O   ASP  41   2690    3223    5774   141   -149  -969
ATOM    337  CB  ASP  41  10.113  34.135  58.915 1.000 33.51
ANISOU  337  CB  ASP  41   4853    4026    3852   -1222 -698  -938
ATOM    338  CG  ASP  41   9.453  33.351  60.039 1.000 33.37
ANISOU  338  CG  ASP  41   3324    5291    4065   -739  -501  -571
ATOM    339  OD1 ASP  41   9.152  32.164  59.780 1.000 34.95
ANISOU  339  OD1 ASP  41   4040    4681    4557   -380   824   -92
ATOM    340  OD2 ASP  41   9.395  33.904  61.161 1.000 86.76
ANISOU  340  OD2 ASP  41   18972   10427    3567   -10425 588  -1858
ATOM    341  N   THR  42   8.272  36.089  57.205 1.000 32.71
ANISOU  341  N   THR  42   3217    3695    5516   9   -58   -586
ATOM    342  CA  THR  42   7.198  37.074  57.221 1.000 38.48
ANISOU  342  CA  THR  42   4747    4161    5711   1067  -861  -630
ATOM    343  C   THR  42   6.005  36.640  56.375 1.000 35.83
ANISOU  343  C   THR  42   3333    4044    6237   1136  157   -1162
ATOM    344  O   THR  42   4.877  36.606  56.900 1.000 38.90
ANISOU  344  O   THR  42   4048    3603    7128   1136  1059  1224
ATOM    345  CB  THR  42   7.751  38.449  56.815 1.000 37.05
ANISOU  345  CB  THR  42   4526    3763    5788   1021  -677  -1532
ATOM    346  OG1 THR  42   8.831  38.301  55.889 1.000 98.08
ANISOU  346  OG1 THR  42   16381   13757   7127   -3208 7500  -2318
ATOM    347  CG2 THR  42   8.358  39.113  58.047 1.000 36.08
ANISOU  347  CG2 THR  42   6097    3613    3997   886   -1119  269
ATOM    348  N   GLU  43   6.259  36.184  55.173 1.000 34.64
ANISOU  348  N   GLU  43   4208    3312    5642   656   -275  -698
ATOM    349  CA  GLU  43   5.391  35.557  54.192 1.000 32.98
ANISOU  349  CA  GLU  43   3527    2886    6120   1199  -883  -152
ATOM    350  C   GLU  43   4.701  34.300  54.713 1.000 41.67
ANISOU  350  C   GLU  43   3454    4151    8229   225   -1743  953
ATOM    351  O   GLU  43   3.484  34.124  54.605 1.000 38.53
ANISOU  351  O   GLU  43   3375    4041    7222   589   -1417  -578
ATOM    352  CB  GLU  43   6.278  35.074  53.026 1.000 44.72
ANISOU  352  CB  GLU  43   5991    4098    6901   28 137 -2137
ATOM    353  CG  GLU  43   6.658  36.125  52.003 1.000 53.42
ANISOU  353  CG  GLU  43   5931    6417    7949   -993  1540  -1338
ATOM    354  CD  GLU  43   7.838  36.976  52.429 1.000 50.41
ANISOU  354  CD  GLU  43   4087    7601    7467   -439  2486  -1725
ATOM    355  OE1 GLU  43   8.024  37.112  53.661 1.000 59.44
ANISOU  355  OE1 GLU  43   7237    7592    7757   -1284 1632  -2146
ATOM    356  OE2 GLU  43   8.555  37.476  51.531 1.000 71.33
ANISOU  356  OE2 GLU  43   11550   6344    9207   -4131 6267  -4645
ATOM    357  N   LEU  44   5.511  33.373  55.224 1.000 27.80
ANISOU  357  N   LEU  44   2837    2924    4802   -55   -626  -227
ATOM    358  CA  LEU  44   4.926  32.222  55.902 1.000 27.88
ANISOU  358  CA  LEU  44   2207    3379    5009   241   813   -382
ATOM    359  C   LEU  44   3.886  32.670  56.934 1.000 34.30
ANISOU  359  C   LEU  44   1930    4771    6333   -537  776   -2629
ATOM    360  O   LEU  44   2.781  32.159  56.924 1.000 33.35
ANISOU  360  O   LEU  44   2046    5235    5390   -840  705   -2397
ATOM    361  CB  LEU  44   5.999  31.394  56.587 1.000 24.59
ANISOU  361  CB  LEU  44   2781    3494    3070   81 940  -74
ATOM    362  CG  LEU  44   5.592  30.147  57.343 1.000 31.76
ANISOU  362  CG  LEU  44   2414    5135    4517   -845  792   1217
ATOM    363  CD1 LEU  44   4.563  29.328  56.575 1.000 47.71
ANISOU  363  CD1 LEU  44   5860    7081    5188   -3576 3333  -2541
ATOM    364  CD2 LEU  44   6.793  29.259  57.653 1.000 51.56
ANISOU  364  CD2 LEU  44   6294    3688    9608   1956  2240  1382
ATOM    365  N   LYS  45   4.212  33.712  57.694 1.000 41.91
ANISOU  365  N   LYS  45   2865    6802    6256   -1455 381   -3537
ATOM    366  CA  LYS  45   3.369  34.195  58.773 1.000 44.31
ANISOU  366  CA  LYS  45   4768    5427    6639   74 837  -2985
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ATOM    367  C   LYS  45   1.981   34.582  58.278 1.000 33.58
ANISOU  367  C   LYS  45   4535    3445    6681   -245  1221 -2820
ATOM    368  O   LYS  45   0.984   34.238  58.902 1.000 39.93
ANISOU  368  O   LYS  45   4857    3594    6720   262   1634 -2337
ATOM    369  CB  LYS  45   4.038   35.400  59.447 1.000 50.20
ANISOU  369  CB  LYS  45   4944    5561    8569   1081  -447 -3980
ATOM    370  CG  LYS  45   3.082   36.546  59.706 1.000 53.07
ANISOU  370  CG  LYS  45   3548    6321    10296  1148  -2094 -4809
ATOM    371  CD  LYS  45   3.714   37.922  59.622 1.000 58.29
ANISOU  371  CD  LYS  45   4723    5694    11730  1422  -3745 -5024
ATOM    372  CE  LYS  45   3.199   38.793  60.761 1.000 65.33
ANISOU  372  CE  LYS  45   6294    6898    11629  1072  -3430 -5603
ATOM    373  NZ  LYS  45   1.713   38.779  60.852 1.000 73.75
ANISOU  373  NZ  LYS  45   6392    9216    12412  -718  -1071 -7436
ATOM    374  N   SER  46   1.973   35.341  57.193 1.000 36.94
ANISOU  374  N   SER  46   4074    3478    6484   -956  1068 -2939
ATOM    375  CA  SER  46   0.743   35.856  56.607 1.000 37.61
ANISOU  375  CA  SER  46   3983    3417    6892   -1335 988  -2335
ATOM    376  C   SER  46   -0.137  34.702  56.137 1.000 34.45
ANISOU  376  C   SER  46   3430    3057    6602   -1104 1656 -2394
ATOM    377  O   SER  46   -1.337  34.625  56.449 1.000 29.50
ANISOU  377  O   SER  46   3195    2789    5224   -587  1093 -1206
ATOM    378  CB  SER  46   1.160   36.726  55.419 1.000 40.36
ANISOU  378  CB  SER  46   4102    3809    7425   -2099 617  -1930
ATOM    379  OG  SER  46   0.018   37.017  54.630 1.000 43.38
ANISOU  379  OG  SER  46   5005    3431    8048   -1261 53  -1863
ATOM    380  N   ALA  47   0.493   33.808  55.361 1.000 29.82
ANISOU  380  N   ALA  47   3246    2173    5910   -18   809  -1228
ATOM    381  CA  ALA  47   -0.208  32.623  54.879 1.000 25.84
ANISOU  381  CA  ALA  47   3566    2106    4148   7  630 -891
ATOM    382  C   ALA  47   -0.722  31.792  56.058 1.000 25.02
ANISOU  382  C   ALA  47   2591    2344    4572   481   280  -280
ATOM    383  O   ALA  47   -1.888  31.381  56.063 1.000 23.19
ANISOU  383  O   ALA  47   2850    2366    3597   129   318  -1119
ATOM    384  CB  ALA  47   0.615   31.791  53.912 1.000 26.76
ANISOU  384  CB  ALA  47   2892    2764    4511   270   351  -1134
ATOM    385  N   LYS  48   0.132   31.529  57.041 1.000 24.64
ANISOU  385  N   LYS  48   3107    2076    4178   130   -57  -1085
ATOM    386  CA  LYS  48   -0.186  30.712  58.202 1.000 25.83
ANISOU  386  CA  LYS  48   3545    2979    3291   -16   30 -1416
ATOM    387  C   LYS  48   -1.337  31.339  59.003 1.000 28.58
ANISOU  387  C   LYS  48   3373    3344    4144   -354  129  -2041
ATOM    388  O   LYS  48   -2.310  30.694  59.396 1.000 27.04
ANISOU  388  O   LYS  48   3849    2793    3633   312   419  -634
ATOM    389  CB  LYS  48   1.035   30.654  59.149 1.000 28.95
ANISOU  389  CB  LYS  48   3507    3294    4200   -274  -257 -738
ATOM    390  CG  LYS  48   0.775   29.694  60.313 1.000 32.96
ANISOU  390  CG  LYS  48   4412    3214    4897   113   -543 -156
ATOM    391  CD  LYS  48   1.418   30.222  61.570 1.000 39.92
ANISOU  391  CD  LYS  48   5828    4616    4724   705   -1278 -39
ATOM    392  CE  LYS  48   1.217   29.320  62.769 1.000 33.67
ANISOU  392  CE  LYS  48   3973    4020    4799   1402  -205 -356
ATOM    393  NZ  LYS  48   0.731   30.100  63.946 1.000 38.33
ANISOU  393  NZ  LYS  48   4516    5230    4816   916   -1039 -1555
ATOM    394  N   ASP  49   -1.253  32.656  59.255 1.000 23.78
ANISOU  394  N   ASP  49   2796    3136    3104   79 -459  -1588
ATOM    395  CA  ASP  49   -2.298  33.326  60.006 1.000 24.05
ANISOU  395  CA  ASP  49   2826    2913    3398   -291  366  -1043
ATOM    396  C   ASP  49   -3.679  33.181  59.366 1.000 24.45
ANISOU  396  C   ASP  49   2721    3270    3300   -220  555  -1454
ATOM    397  O   ASP  49   -4.637  32.951  60.082 1.000 27.10
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ANISOU	397	O	ASP	49	2863	3177	4257	-368	1004	-1544
ATOM	398	CB	ASP	49	-2.034	34.824	60.167	1.000	30.34	
ANISOU	398	CB	ASP	49	3695	3210	4623	-559	713	-2178
ATOM	399	CG	ASP	49	-0.924	35.181	61.128	1.000	37.18	
ANISOU	399	CG	ASP	49	5259	4057	4810	-1109	-211	-2007
ATOM	400	OD1	ASP	49	-0.556	34.266	61.904	1.000	33.36	
ANISOU	400	OD1	ASP	49	3717	4549	4408	-737	888	-1727
ATOM	401	OD2	ASP	49	-0.525	36.375	61.087	1.000	48.45	
ANISOU	401	OD2	ASP	49	7960	3575	6875	-927	-2887	-2409
ATOM	402	N	LEU	50	-3.788	33.402	58.059	1.000	24.46	
ANISOU	402	N	LEU	50	3114	2668	3513	374	200	-1298
ATOM	403	CA	LEU	50	-5.123	33.344	57.471	1.000	22.92	
ANISOU	403	CA	LEU	50	2949	2145	3614	161	397	-562
ATOM	404	C	LEU	50	-5.679	31.937	57.328	1.000	21.79	
ANISOU	404	C	LEU	50	3345	2197	2737	33	417	-556
ATOM	405	O	LEU	50	-6.878	31.741	57.475	1.000	24.96	
ANISOU	405	O	LEU	50	3463	2502	3517	-276	766	-1181
ATOM	406	CB	LEU	50	-5.254	34.137	56.194	1.000	22.13	
ANISOU	406	CB	LEU	50	3127	2016	3266	-103	524	-757
ATOM	407	CG	LEU	50	-6.661	34.578	55.807	1.000	28.87	
ANISOU	407	CG	LEU	50	3549	3538	3881	961	825	208
ATOM	408	CD1	LEU	50	-7.389	35.082	57.049	1.000	52.72	
ANISOU	408	CD1	LEU	50	4567	8556	6907	940	2929	-1936
ATOM	409	CD2	LEU	50	-6.644	35.642	54.723	1.000	41.07	
ANISOU	409	CD2	LEU	50	6971	3395	5240	-1005	-2258	857
ATOM	410	N	VAL	51	-4.801	30.956	57.138	1.000	21.78	
ANISOU	410	N	VAL	51	3345	2052	2877	-160	216	-860
ATOM	411	CA	VAL	51	-5.293	29.580	57.118	1.000	19.40	
ANISOU	411	CA	VAL	51	2631	2056	2683	-12	173	-303
ATOM	412	C	VAL	51	-5.631	29.135	58.533	1.000	25.25	
ANISOU	412	C	VAL	51	4453	2656	2485	-753	587	-955
ATOM	413	O	VAL	51	-6.652	28.454	58.725	1.000	25.07	
ANISOU	413	O	VAL	51	4555	2176	2795	-484	1185	-827
ATOM	414	CB	VAL	51	-4.377	28.589	56.396	1.000	18.78	
ANISOU	414	CB	VAL	51	2729	1786	2620	-72	171	-313
ATOM	415	CG1	VAL	51	-3.152	28.238	57.231	1.000	20.42	
ANISOU	415	CG1	VAL	51	3002	1841	2918	295	-13	-480
ATOM	416	CG2	VAL	51	-5.147	27.306	56.021	1.000	24.10	
ANISOU	416	CG2	VAL	51	3112	2337	3708	-511	355	-846
ATOM	417	N	ILE	52	-4.836	29.500	59.534	1.000	25.23	
ANISOU	417	N	ILE	52	4514	2471	2603	388	76	-874
ATOM	418	CA	ILE	52	-5.205	29.114	60.921	1.000	24.38	
ANISOU	418	CA	ILE	52	3488	3010	2765	248	19	-509
ATOM	419	C	ILE	52	-6.498	29.771	61.355	1.000	24.20	
ANISOU	419	C	ILE	52	3026	2482	3687	-354	114	-648
ATOM	420	O	ILE	52	-7.328	29.182	62.071	1.000	27.73	
ANISOU	420	O	ILE	52	3735	2812	3989	-198	614	-334
ATOM	421	CB	ILE	52	-4.016	29.427	61.829	1.000	27.59	
ANISOU	421	CB	ILE	52	3321	4347	2815	590	0	-785
ATOM	422	CG1	ILE	52	-2.853	28.439	61.510	1.000	31.45	
ANISOU	422	CG1	ILE	52	3278	5248	3425	741	363	-1288
ATOM	423	CG2	ILE	52	-4.293	29.312	63.317	1.000	33.62	
ANISOU	423	CG2	ILE	52	3827	6199	2750	881	150	-1454
ATOM	424	CD1	ILE	52	-1.930	28.351	62.710	1.000	36.22	
ANISOU	424	CD1	ILE	52	3956	5082	4722	979	-601	-234
ATOM	425	N	ASP	53	-6.771	30.992	60.913	1.000	24.56	
ANISOU	425	N	ASP	53	3479	2878	2974	165	609	-426
ATOM	426	CA	ASP	53	-8.051	31.646	61.278	1.000	23.50	
ANISOU	426	CA	ASP	53	3242	2942	2745	-5	355	-677
ATOM	427	C	ASP	53	-9.201	30.929	60.594	1.000	26.34	
ANISOU	427	C	ASP	53	3462	2986	3561	-435	612	-1064

ATOM	428	O	ASP	53	-10.342	30.836	61.051	1.000	29.73	
ANISOU	428	O	ASP	53	3468	3085	4743	-436	937	-1142
ATOM	429	CB	ASP	53	-7.964	33.084	60.772	1.000	33.83	
ANISOU	429	CB	ASP	53	3800	2322	6730	-92	1806	-933
ATOM	430	CG	ASP	53	-9.308	33.758	60.583	1.000	32.05	
ANISOU	430	CG	ASP	53	4652	2412	5113	172	-302	-1138
ATOM	431	OD1	ASP	53	-9.653	34.524	61.486	1.000	43.68	
ANISOU	431	OD1	ASP	53	3661	4686	8248	150	1379	-3120
ATOM	432	OD2	ASP	53	-9.950	33.556	59.532	1.000	51.30	
ANISOU	432	OD2	ASP	53	8386	6074	5033	-2062	-1738	922
ATOM	433	N	PHE	54	-8.933	30.376	59.413	1.000	25.39	
ANISOU	433	N	PHE	54	3372	2640	3637	72	71	-1176
ATOM	434	CA	PHE	54	-9.917	29.557	58.704	1.000	24.10	
ANISOU	434	CA	PHE	54	3015	3264	2876	-366	263	-539
ATOM	435	C	PHE	54	-10.180	28.259	59.456	1.000	24.00	
ANISOU	435	C	PHE	54	3264	3174	2680	-365	459	-688
ATOM	436	O	PHE	54	-11.333	27.893	59.686	1.000	28.19	
ANISOU	436	O	PHE	54	3551	3246	3914	-549	1305	-1130
ATOM	437	CB	PHE	54	-9.465	29.273	57.263	1.000	23.62	
ANISOU	437	CB	PHE	54	3241	2955	2779	-249	218	-434
ATOM	438	CG	PHE	54	-10.522	28.499	56.461	1.000	27.62	
ANISOU	438	CG	PHE	54	4712	2945	2838	-694	-636	1 4
ATOM	439	CD1	PHE	54	-11.729	29.078	56.087	1.000	31.38	
ANISOU	439	CD1	PHE	54	3613	4658	3654	-951	-262	-621
ATOM	440	CD2	PHE	54	-10.283	27.210	56.033	1.000	30.92	
ANISOU	440	CD2	PHE	54	5782	3589	2377	-831	293	-844
ATOM	441	CE1	PHE	54	-12.653	28.406	55.307	1.000	44.29	
ANISOU	441	CE1	PHE	54	5504	5404	5919	-3066	-2057	1178
ATOM	442	CE2	PHE	54	-11.228	26.503	55.306	1.000	38.69	
ANISOU	442	CE2	PHE	54	7997	4412	2289	-2803	155	-387
ATOM	443	CZ	PHE	54	-12.424	27.092	54.927	1.000	42.33	
ANISOU	443	CZ	PHE	54	5992	6305	3787	-4256	54	-446
ATOM	444	N	PHE	55	-9.126	27.558	59.870	1.000	25.87	
ANISOU	444	N	PHE	55	3787	2768	3276	-85	431	-839
ATOM	445	CA	PHE	55	-9.195	26.310	60.625	1.000	25.69	
ANISOU	445	CA	PHE	55	3567	3042	3151	68	763	-711
ATOM	446	C	PHE	55	-9.929	26.484	61.944	1.000	27.69	
ANISOU	446	C	PHE	55	3357	3961	3205	181	703	-719
ATOM	447	O	PHE	55	-10.745	25.670	62.373	1.000	30.08	
ANISOU	447	O	PHE	55	4046	4165	3217	142	878	-127
ATOM	448	CB	PHE	55	-7.759	25.873	60.932	1.000	25.48	
ANISOU	448	CB	PHE	55	3556	3159	2964	117	835	-638
ATOM	449	CG	PHE	55	-7.019	25.242	59.762	1.000	26.31	
ANISOU	449	CG	PHE	55	3437	3039	3522	-468	1068	-1156
ATOM	450	CD1	PHE	55	-7.611	24.820	58.590	1.000	27.09	
ANISOU	450	CD1	PHE	55	3553	3895	2845	-1018	1404	-658
ATOM	451	CD2	PHE	55	-5.651	25.031	59.935	1.000	31.68	
ANISOU	451	CD2	PHE	55	3244	4185	4609	-726	1123	-2221
ATOM	452	CE1	PHE	55	-6.878	24.150	57.621	1.000	23.89	
ANISOU	452	CE1	PHE	55	3472	2525	3079	-58	551	-547
ATOM	453	CE2	PHE	55	-4.904	24.433	58.950	1.000	31.74	
ANISOU	453	CE2	PHE	55	3487	4387	4186	226	337	-2304
ATOM	454	CZ	PHE	55	-5.514	24.004	57.770	1.000	24.23	
ANISOU	454	CZ	PHE	55	3706	2187	3312	414	-22	-416
ATOM	455	N	GLU	56	-9.633	27.581	62.629	1.000	30.39	
ANISOU	455	N	GLU	56	3961	5033	2553	-308	520	-1110
ATOM	456	CA	GLU	56	-10.222	27.875	63.925	1.000	30.18	
ANISOU	456	CA	GLU	56	4160	4504	2805	-734	1221	-637
ATOM	457	C	GLU	56	-11.650	28.401	63.820	1.000	33.50	
ANISOU	457	C	GLU	56	4324	4124	4280	-535	1489	-892
ATOM	458	O	GLU	56	-12.470	28.149	64.708	1.000	44.44	

ANISOU	458	O	GLU	56	3864	8872	4150	93	1013	1011	
ATOM	459	CB	GLU	56	-9.403	28.978	64.615	1.000	35.85		
ANISOU	459	CB	GLU	56	5037	5109	3475	-221	574	-1821	
ATOM	460	CG	GLU	56	-8.192	28.508	65.401	1.000	38.63		
ANISOU	460	CG	GLU	56	4804	7152	2721	-337	763	-1692	
ATOM	461	CD	GLU	56	-7.395	29.699	65.916	1.000	45.55		
ANISOU	461	CD	GLU	56	5576	7183	4546	-24	-295	-2330	
ATOM	462	OE1	GLU	56	-7.935	30.828	65.888	1.000	55.54		
ANISOU	462	OE1	GLU	56	7344	7247	6512	586	2570	-3059	
ATOM	463	OE2	GLU	56	-6.246	29.492	66.350	1.000	50.41		
ANISOU	463	OE2	GLU	56	4050	10497	4606	-1066	1163	-2063	
ATOM	464	N	HIS	57	-11.890	29.289	62.866	1.000	32.20		
ANISOU	464	N	HIS	57	3273	4700	4261	-549	1540	-670	
ATOM	465	CA	HIS	57	-13.101	30.078	62.909	1.000	33.38		
ANISOU	465	CA	HIS	57	3795	4885	4002	-110	1553	-1239	
ATOM	466	C	HIS	57	-13.981	29.873	61.697	1.000	32.85		
ANISOU	466	C	HIS	57	3380	4736	4367	278	1506	-1797	
ATOM	467	O	HIS	57	-15.012	30.533	61.571	1.000	37.09		
ANISOU	467	O	HIS	57	3362	4733	5998	276	1087	-2205	
ATOM	468	CB	HIS	57	-12.802	31.573	62.976	1.000	37.39		
ANISOU	468	CB	HIS	57	4327	4959	4922	-193	1402	-1970	
ATOM	469	CG	HIS	57	-11.981	31.949	64.162	1.000	36.99		
ANISOU	469	CG	HIS	57	4111	5046	4896	680	1344	-2319	
ATOM	470	ND1	HIS	57	-12.465	31.917	65.453	1.000	38.84		
ANISOU	470	ND1	HIS	57	5090	4844	4823	-171	1362	-1598	
ATOM	471	CD2	HIS	57	-10.707	32.387	64.232	1.000	37.91		
ANISOU	471	CD2	HIS	57	5259	4197	4947	-891	1544	-2828	
ATOM	472	CE1	HIS	57	-11.510	32.305	66.275	1.000	40.37		
ANISOU	472	CE1	HIS	57	5481	5191	4668	-243	1087	-1361	
ATOM	473	NE2	HIS	57	-10.441	32.592	65.552	1.000	35.63		
ANISOU	473	NE2	HIS	57	4420	4376	4743	980	799	-1492	
ATOM	474	N	GLY	58	-13.464	29.068	60.786	1.000	32.06		
ANISOU	474	N	GLY	58	4402	3186	4594	-5	1572	-1525	
ATOM	475	CA	GLY	58	-14.290	28.731	59.627	1.000	35.74		
ANISOU	475	CA	GLY	58	4508	4402	4669	-1129	1877	-1893	
ATOM	476	C	GLY	58	-15.449	27.859	60.099	1.000	31.52		
ANISOU	476	C	GLY	58	3317	3688	4969	308	1657	-593	
ATOM	477	O	GLY	58	-15.245	26.952	60.922	1.000	32.66		
ANISOU	477	O	GLY	58	4561	4176	3674	-204	624	-1012	
ATOM	478	N	SER	59	-16.632	28.152	59.574	1.000	31.03		
ANISOU	478	N	SER	59	3786	3623	4379	519	1142	-1442	
ATOM	479	CA	SER	59	-17.823	27.359	59.859	1.000	32.03		
ANISOU	479	CA	SER	59	3305	3925	4939	757	850	-1188	
ATOM	480	C	SER	59	-17.763	26.034	59.117	1.000	37.27		
ANISOU	480	C	SER	59	3654	4001	6507	0	2065	-1682	
ATOM	481	O	SER	59	-16.987	25.858	58.181	1.000	31.23		
ANISOU	481	O	SER	59	3027	3655	5184	613	1003	-1174	
ATOM	482	CB	SER	59	-19.077	28.136	59.444	1.000	39.80		
ANISOU	482	CB	SER	59	3930	5925	5266	1707	-545	-2846	
ATOM	483	OG	SER	59	-19.252	28.159	58.029	1.000	35.38		
ANISOU	483	OG	SER	59	3505	4800	5137	355	119	-1624	
ATOM	484	N	GLU	60	-18.589	25.065	59.507	1.000	46.32		
ANISOU	484	N	GLU	60	5438	6083	6078	-2395	2115	-2700	
ATOM	485	CA	GLU	60	-18.573	23.801	58.754	1.000	34.21		
ANISOU	485	CA	GLU	60	3381	4798	4818	-960	716	-1238	
ATOM	486	C	GLU	60	-19.033	24.055	57.330	1.000	34.22		
ANISOU	486	C	GLU	60	4659	3711	4632	455	1378	-847	
ATOM	487	O	GLU	60	-18.616	23.437	56.361	1.000	29.91		
ANISOU	487	O	GLU	60	3708	3040	4615	-679	2037	-604	
ATOM	488	CB	GLU	60	-19.390	22.742	59.488	1.000	38.26		
ANISOU	488	CB	GLU	60	5012	5567	3958	-1599	748	-1000	

ATOM	489	CG	GLU	60	-18.625	22.182	60.678	1.000	42.01		
ANISOU	489	CG	GLU	60	5470	5439	5055	503	950	-782	
ATOM	490	CD	GLU	60	-17.307	21.528	60.312	1.000	45.34		
ANISOU	490	CD	GLU	60	4036	7496	5695	-885	1094	-2276	
ATOM	491	OE1	GLU	60	-17.219	20.867	59.264	1.000	49.69		
ANISOU	491	OE1	GLU	60	5383	6689	6809	-864	1730	-2838	
ATOM	492	OE2	GLU	60	-16.323	21.659	61.084	1.000	43.62		
ANISOU	492	OE2	GLU	60	4677	4974	6924	-1984	109	-12	
ATOM	493	N	ALA	61	-19.928	25.028	57.167	1.000	34.26		
ANISOU	493	N	ALA	61	3091	3912	6014	-81	1209	-1122	
ATOM	494	CA	ALA	61	-20.408	25.324	55.823	1.000	33.07		
ANISOU	494	CA	ALA	61	1647	4409	6508	-228	657	-1105	
ATOM	495	C	ALA	61	-19.314	25.876	54.938	1.000	30.69		
ANISOU	495	C	ALA	61	2053	3742	5866	-59	640	-1066	
ATOM	496	O	ALA	61	-19.138	25.482	53.790	1.000	31.15		
ANISOU	496	O	ALA	61	2754	2893	6189	31	793	-1285	
ATOM	497	CB	ALA	61	-21.543	26.336	55.932	1.000	34	43	
ANISOU	497	CB	ALA	61	2783	4403	5897	288	1210	-1650	
ATOM	498	N	GLU	62	-18.568	26.824	55.498	1.000	28.80		
ANISOU	498	N	GLU	62	2168	3404	5371	-9	915	-964	
ATOM	499	CA	GLU	62	-17.478	27.395	54.704	1.000	26.78		
ANISOU	499	CA	GLU	62	2339	2374	5461	423	871	-413	
ATOM	500	C	GLU	62	-16.432	26.330	54.389	1.000	22.61		
ANISOU	500	C	GLU	62	2569	1621	4402	84	1049	-376	
ATOM	501	O	GLU	62	-15.851	26.316	53.289	1.000	24.41		
ANISOU	501	O	GLU	62	2399	2669	4209	-132	801	-548	
ATOM	502	CB	GLU	62	-16.861	28.591	55.429	1.000	32.86		
ANISOU	502	CB	GLU	62	3129	2117	7239	251	2039	-1358	
ATOM	503	CG	GLU	62	-17.739	29.834	55.554	1.000	34.69		
ANISOU	503	CG	GLU	62	2824	2859	7499	916	-95	-1430	
ATOM	504	CD	GLU	62	-17.274	30.810	56.616	1.000	38.93		
ANISOU	504	CD	GLU	62	4998	2780	7014	1622	224	-1820	
ATOM	505	OE1	GLU	62	-16.861	30.391	57.717	1.000	40.92		
ANISOU	505	OE1	GLU	62	4844	3636	7068	1268	34	-1673	
ATOM	506	OE2	GLU	62	-17.324	32.041	56.385	1.000	45.13		
ANISOU	506	OE2	GLU	62	7600	2889	6658	-525	1698	-1099	
ATOM	507	N	LYS	63	-16.193	25.431	55.345	1.000	25.20		
ANISOU	507	N	LYS	63	2470	2380	4723	312	1050	8	
ATOM	508	CA	LYS	63	-15.214	24.369	55.207	1.000	21.62		
ANISOU	508	CA	LYS	63	2608	2894	2712	688	349	-446	
ATOM	509	C	LYS	63	-15.708	23.397	54.147	1.000	22.42		
ANISOU	509	C	LYS	63	2930	3038	2549	84	433	-217	
ATOM	510	O	LYS	63	-14.913	23.038	53.289	1.000	24.17		
ANISOU	510	O	LYS	63	3340	2354	3491	239	782	-790	
ATOM	511	CB	LYS	63	-14.940	23.650	56.534	1.000	24.50		
ANISOU	511	CB	LYS	63	3411	3057	2842	42	-105	-299	
ATOM	512	CG	LYS	63	-13.963	24.465	57.381	1.000	27.58		
ANISOU	512	CG	LYS	63	4640	2792	3045	-302	-465	-306	
ATOM	513	CD	LYS	63	-13.866	23.937	58.811	1.000	26.09		
ANISOU	513	CD	LYS	63	3132	3570	3211	305	-575	-12	
ATOM	514	CE	LYS	63	-12.761	24.695	59.560	1.000	28.96		
ANISOU	514	CE	LYS	63	4342	3579	3083	-317	-286	-792	
ATOM	515	NZ	LYS	63	-12.927	24.614	61.030	1.000	35.00		
ANISOU	515	NZ	LYS	63	4884	5356	3057	64	-298	-817	
ATOM	516	N	ARG	64	-17.007	23.112	54.143	1.000	29.82		
ANISOU	516	N	ARG	64	3238	2676	5418	-533	1111	-1259	
ATOM	517	CA	ARG	64	-17.521	22.169	53.118	1.000	25.56		
ANISOU	517	CA	ARG	64	2396	2474	4841	-170	1252	-962	
ATOM	518	C	ARG	64	-17.417	22.735	51.708	1.000	28.45		
ANISOU	518	C	ARG	64	3022	2681	5106	153	1369	-562	
ATOM	519	O	ARG	64	-17.149	21.981	50.759	1.000	22.57		

ANISOU	519	O	ARG	64	1672	2466	4436	-71	148	-395	
ATOM	520	CB	ARG	64	-18.937	21.809	53.537	1.000	32.48		
ANISOU	520	CB	ARG	64	2669	4144	5526	-809	1483	-1029	
ATOM	521	CG	ARG	64	-19.094	20.442	54.189	1.000	45.55		
ANISOU	521	CG	ARG	64	4444	4749	8116	-2443	1343	-153	
ATOM	522	CD	ARG	64	-20.557	19.985	54.080	1.000	59.48		
ANISOU	522	CD	ARG	64	5723	6760	10116	-3977	-2863	2461	
ATOM	523	NE	ARG	64	-20.759	19.485	52.714	1.000	77.63		
ANISOU	523	NE	ARG	64	10254	9303	9938	-4031	-4193	2666	
ATOM	524	CZ	ARG	64	-21.166	20.236	51.696	1.000	60.23		
ANISOU	524	CZ	ARG	64	5289	6952	10644	-1128	-4334	501	
ATOM	525	NH1	ARG	64	-21.424	21.528	51.892	1.000	91.64		
ANISOU	525	NH1	ARG	64	18286	5072	11461	-5082	-3134	-75	
ATOM	526	NH2	ARG	64	-21.286	19.711	50.489	1.000	43.67		
ANISOU	526	NH2	ARG	64	3318	4095	9178	-183	-1521	2085	
ATOM	527	N	ALA	65	-17.624	24.041	51.515	1.000	26.71		
ANISOU	527	N	ALA	65	1907	2770	5472	189	936	-556	
ATOM	528	CA	ALA	65	-17.522	24.661	50.199	1.000	24.91		
ANISOU	528	CA	ALA	65	1798	2379	5288	280	417	-754	
ATOM	529	C	ALA	65	-16.109	24.575	49.595	1.000	21.81		
ANISOU	529	C	ALA	65	1808	2408	4071	597	155	-626	
ATOM	530	O	ALA	65	-15.935	24.724	48.381	1.000	24.13		
ANISOU	530	O	ALA	65	2127	3076	3964	224	-220	-485	
ATOM	531	CB	ALA	65	-18.023	26.096	50.221	1.000	31.78		
ANISOU	531	CB	ALA	65	3096	2984	5993	1337	1401	-453	
ATOM	532	N	VAL	66	-15.098	24.306	50.426	1.000	19.29		
ANISOU	532	N	VAL	66	1836	1880	3614	466	360	-541	
ATOM	533	CA	VAL	66	-13.723	24.167	49.953	1.000	18.17		
ANISOU	533	CA	VAL	66	1636	1653	3616	204	79	-487	
ATOM	534	C	VAL	66	-13.166	22.767	50.248	1.000	15.18		
ANISOU	534	C	VAL	66	1516	1638	2613	120	126	-571	
ATOM	535	O	VAL	66	-11.959	22.623	50.353	1.000	17.63		
ANISOU	535	O	VAL	66	1567	2071	3060	217	-106	-317	
ATOM	536	CB	VAL	66	-12.784	25.277	50.437	1.000	18.91		
ANISOU	536	CB	VAL	66	2175	1576	3433	183	-135	-598	
ATOM	537	CG1	VAL	66	-13.139	26.627	49.805	1.000	20.60		
ANISOU	537	CG1	VAL	66	2067	1751	4010	219	593	-83	
ATOM	538	CG2	VAL	66	-12.736	25.373	51.945	1.000	21.61		
ANISOU	538	CG2	VAL	66	2689	2066	3455	102	22	-603	
ATOM	539	N	THR	67	-14.048	21.792	50.343	1.000	18.30		
ANISOU	539	N	THR	67	1761	1614	3577	-20	-6	-514	
ATOM	540	CA	THR	67	-13.673	20.403	50.563	1.000	17.18		
ANISOU	540	CA	THR	67	1927	1656	2946	-32	50	-556	
ATOM	541	C	THR	67	-13.979	19.566	49.332	1.000	16.52		
ANISOU	541	C	THR	67	1763	1742	2773	21	27	-467	
ATOM	542	O	THR	67	-15.107	19.613	48.811	1.000	18.13		
ANISOU	542	O	THR	67	1750	2211	2929	73	-86	-383	
ATOM	543	CB	THR	67	-14.373	19.791	51.782	1.000	18.54		
ANISOU	543	CB	THR	67	2202	2014	2827	192	224	-492	
ATOM	544	OG1	THR	67	-14.060	20.554	52.961	1.000	20.14		
ANISOU	544	OG1	THR	67	2481	2251	2920	-108	155	-468	
ATOM	545	CG2	THR	67	-13.912	18.364	52.017	1.000	20.04		
ANISOU	545	CG2	THR	67	2393	2016	3203	29	-86	-235	
ATOM	546	N	SER	68	-13.030	18.818	48.821	1.000	16.71		
ANISOU	546	N	SER	68	1612	1720	3018	-135	154	-498	
ATOM	547	CA	SER	68	-13.281	17.947	47.688	1.000	16.33		
ANISOU	547	CA	SER	68	1508	1631	3065	-184	365	-561	
ATOM	548	C	SER	68	-14.223	16.795	48.057	1.000	14.85		
ANISOU	548	C	SER	68	1194	1775	2672	-81	197	-448	
ATOM	549	O	SER	68	-14.303	16.431	49.233	1.000	16.36		
ANISOU	549	O	SER	68	1783	1775	2659	-145	192	-481	

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ATOM    550  CB  SER   68     -11.958  17.303   47.257  1.000  17.84
ANISOU  550  CB  SER   68       1459     2139     3182    -87    647   -313
ATOM    551  OG  SER   68     -10.998  18.259   46.904  1.000  17.21
ANISOU  551  OG  SER   68       1659     1987     2893    -75    364    -49
ATOM    552  N   PRO   69     -14.929  16.284   47.054  1.000  15.89
ANISOU  552  N   PRO   69       1574     1661     2803   -201   -103   -280
ATOM    553  CA  PRO   69     -15.877  15.182   47.339  1.000  16.42
ANISOU  553  CA  PRO   69       1428     1903     2908   -251   -148   -218
ATOM    554  C   PRO   69     -15.168  13.889   47.684  1.000  17.22
ANISOU  554  C   PRO   69       1633     1578     3331   -199    266   -424
ATOM    555  O   PRO   69     -15.794  12.997   48.287  1.000  18.35
ANISOU  555  O   PRO   69       1815     1760     3399   -365    232   -376
ATOM    556  CB  PRO   69     -16.712  15.057   46.060  1.000  16.75
ANISOU  556  CB  PRO   69       1354     2279     2733   -360    155   -729
ATOM    557  CG  PRO   69     -15.799  15.637   45.008  1.000  16.72
ANISOU  557  CG  PRO   69       1553     1971     2827   -359     38   -452
ATOM    558  CD  PRO   69     -15.059  17.797   45.681  1.000  17.10
ANISOU  558  CD  PRO   69       1918     1804     2776   -344   -119   -313
ATOM    559  N   VAL   70     -13.884  13.746   47.366  1.000  18.07
ANISOU  559  N   VAL   70       1716     1764     3384    -89    292   -215
ATOM    560  CA  VAL   70     -13.100  12.594   47.824  1.000  17.34
ANISOU  560  CA  VAL   70       1763     1851     2974    -20    260   -196
ATOM    561  C   VAL   70     -11.995  13.142   48.720  1.000  17.59
ANISOU  561  C   VAL   70       2207     1686     2788   -180    159   -142
ATOM    562  O   VAL   70     -11.431  14.186   48.389  1.000  18.59
ANISOU  562  O   VAL   70       1794     1688     3581    -49    152
ATOM    563  CB  VAL   70     -12.429  11.757   46.724  1.000  18.10
ANISOU  563  CB  VAL   70       1922     1756     3199   -353    560   -446
ATOM    564  CG1 VAL   70     -13.441  10.754   46.213  1.000  20.54
ANISOU  564  CG1 VAL   70       1927     2611     3268   -369     76   -663
ATOM    565  CG2 VAL   70     -11.760  12.608   45.642  1.000  17.65
ANISOU  565  CG2 VAL   70       2379     1806     2520    145      9    10
ATOM    566  N   PRO   71     -11.697  12.466   49.815  1.000  16.21
ANISOU  566  N   PRO   71       1653     1810     2695    -34    464   -156
ATOM    567  CA  PRO   71     -10.839  13.091   50.833  1.000  17.32
ANISOU  567  CA  PRO   71       1795     1931     2854   -121    184    -12
ATOM    568  C   PRO   71      -9.356  12.804   50.590  1.000  17.67
ANISOU  568  C   PRO   71       1865     1927     2921     46   -57   156
ATOM    569  O   PRO   71      -8.585  12.223   51.350  1.000  20.57
ANISOU  569  O   PRO   71       2218     2247     3350    424     28   474
ATOM    570  CB  PRO   71     -11.362  12.458   52.117  1.000  19.76
ANISOU  570  CB  PRO   71       2976     1862     2668   -347    479   -304
ATOM    571  CG  PRO   71     -11.721  11.056   51.670  1.000  19.08
ANISOU  571  CG  PRO   71       2838     1805     2608   -267    259   -234
ATOM    572  CD  PRO   71     -12.323  11.220   50.286  1.000  17.97
ANISOU  572  CD  PRO   71       2314     1974     2538   -390    451   -167
ATOM    573  N   THR   72      -8.894  13.338   49.446  1.000  17.15
ANISOU  573  N   THR   72       1677     2231     2610   -215    -17   -165
ATOM    574  CA  THR   72      -7.573  13.012   48.935  1.000  16.83
ANISOU  574  CA  THR   72       1721     1863     2810    -60   -134   -472
ATOM    575  C   THR   72      -6.490  14.000   49.358  1.000  15.20
ANISOU  575  C   THR   72       1791     1623     2362   -304    163    -73
ATOM    576  O   THR   72      -5.320  13.729   49.104  1.000  17.49
ANISOU  576  O   THR   72       1776     1961     2908    -61    -31   -225
ATOM    577  CB  THR   72      -7.533  12.971   47.399  1.000  16.18
ANISOU  577  CB  THR   72       1552     1848     2748   -146    -86   -261
ATOM    578  OG1 THR   72      -8.091  14.238   47.005  1.000  17.81
ANISOU  578  OG1 THR   72       1856     1880     3031    -34    115   -191
ATOM    579  CG2 THR   72      -8.338  11.816   46.825  1.000  17.49
ANISOU  579  CG2 THR   72       1953     2087     2605   -550    181   -329
ATOM    580  N   MET   73      -6.877  15.098   49.987  1.000  17.78
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ANISOU	580	N	MET	73	2057	1748	2951	-58	-254	-426
ATOM	581	CA	MET	73	-5.867	16.117	50.394	1.000	16.58	
ANISOU	581	CA	MET	73	1796	1708	2797	88	-302	-340
ATOM	582	C	MET	73	-5.073	16.618	49.198	1.000	16.65	
ANISOU	582	C	MET	73	1514	1787	3027	241	-162	-420
ATOM	583	O	MET	73	-3.911	17.039	49.292	1.000	19.39	
ANISOU	583	O	MET	73	1705	2313	3348	-112	-240	-540
ATOM	584	CB	MET	73	-4.925	15.531	51.469	1.000	20.56	
ANISOU	584	CB	MET	73	2099	2629	3083	345	-507	-286
ATOM	585	CG	MET	73	-5.703	15.154	52.715	1.000	30.33	
ANISOU	585	CG	MET	73	3008	5133	3384	-69	-609	1027
ATOM	586	SD	MET	73	-4.692	14.263	53.891	1.000	36.13	
ANISOU	586	SD	MET	73	4121	5050	4558	336	-918	1596
ATOM	587	CE	MET	73	-3.165	13.987	53.082	1.000	58.07	
ANISOU	587	CE	MET	73	2810	8820	10435	975	-1592	-3138
ATOM	588	N	ARG	74	-5.687	16.632	48.025	1.000	16.83	
ANISOU	588	N	ARG	74	1699	1714	2982	-6	-211	131
ATOM	589	CA	ARG	74	-5.099	17.215	46.817	1.000	15.87	
ANISOU	589	CA	ARG	74	1365	1618	3046	-17	52	-325
ATOM	590	C	ARG	74	-5.359	18.714	46.761	1.000	14.22	
ANISOU	590	C	ARG	74	1484	1651	2269	141	-32	-42
ATOM	591	O	ARG	74	-4.472	19.488	46.353	1.000	15.45	
ANISOU	591	O	ARG	74	1525	1758	2586	-12	-46	-73
ATOM	592	CB	ARG	74	-5.675	16.530	45.566	1.000	15.68	
ANISOU	592	CB	ARG	74	1330	1667	2959	160	-14	-311
ATOM	593	CG	ARG	74	-4.890	16.941	44.299	1.000	16.46	
ANISOU	593	CG	ARG	74	1325	1870	3059	-175	55	-395
ATOM	594	CD	ARG	74	-5.655	16.396	43.072	1.000	16.37	
ANISOU	594	CD	ARG	74	1789	1533	2899	-181	-8	-177
ATOM	595	NE	ARG	74	-4.840	16.601	41.857	1.000	19.21	
ANISOU	595	NE	ARG	74	2289	1990	3020	-142	241	-156
ATOM	596	CZ	ARG	74	-4.944	17.626	41.039	1.000	17.00	
ANISOU	596	CZ	ARG	74	1545	2351	2562	-67	26	-147
ATOM	597	NH1	ARG	74	-5.878	18.573	41.213	1.000	18.00	
ANISOU	597	NH1	ARG	74	1818	2383	2638	51	-66	-220
ATOM	598	NH2	ARG	74	-4.144	17.703	39.987	1.000	20.50	
ANISOU	598	NH2	ARG	74	2285	2972	2532	-110	310	-387
ATOM	599	N	ARG	75	-6.579	19.151	47.101	1.000	15.28	
ANISOU	599	N	ARG	75	1755	1544	2507	137	340	-173
ATOM	600	CA	ARG	75	-6.999	20.550	46.980	1.000	14.68	
ANISOU	600	CA	ARG	75	1679	1627	2272	236	98	-150
ATOM	601	C	ARG	75	-7.956	20.869	48.122	1.000	14.75	
ANISOU	601	C	ARG	75	1445	1747	2414	124	133	-233
ATOM	602	O	ARG	75	-8.760	19.989	48.460	1.000	18.12	
ANISOU	602	O	ARG	75	1677	2109	3101	-156	458	-433
ATOM	603	CB	ARG	75	-7.747	20.804	45.668	1.000	15.59	
ANISOU	603	CB	ARG	75	1577	2030	2317	1	46	-106
ATOM	604	CG	ARG	75	-6.848	20.634	44.441	1.000	15.63	
ANISOU	604	CG	ARG	75	1495	2110	2334	9	147	220
ATOM	605	CD	ARG	75	-5.712	21.618	44.334	1.000	15.59	
ANISOU	605	CD	ARG	75	1658	1792	2475	11	130	-10
ATOM	606	NE	ARG	75	-5.061	21.601	43.011	1.000	15.25	
ANISOU	606	NE	ARG	75	1421	1779	2596	122	227	144
ATOM	607	CZ	ARG	75	-3.957	20.865	42.732	1.000	14.90	
ANISOU	607	CZ	ARG	75	1079	2361	2221	71	-86	242
ATOM	608	NH1	ARG	75	-3.405	20.091	43.664	1.000	16.18	
ANISOU	608	NH1	ARG	75	1804	1722	2623	-134	-387	337
ATOM	609	NH2	ARG	75	-3.418	20.940	41.518	1.000	15.83	
ANISOU	609	NH2	ARG	75	1677	2107	2232	-193	221	0
ATOM	610	N	GLY	76	-7.895	22.086	48.651	1.000	16.06	
ANISOU	610	N	GLY	76	1686	1904	2513	109	220	-464

ATOM	611	CA	GLY	76	-8.858	22.532	49.637	1.000	16.67	
ANISOU	611	CA	GLY	76	1650	2260	2425	-70	199	-612
ATOM	612	C	GLY	76	-8.602	22.002	51.036	1.000	16.32	
ANISOU	612	C	GLY	76	1584	2014	2602	-126	268	-347
ATOM	613	O	GLY	76	-7.469	21.651	51.370	1.000	16.87	
ANISOU	613	O	GLY	76	1638	1998	2773	-45	308	-218
ATOM	614	N	PHE	77	-9.643	22.025	51.863	1.000	16.88	
ANISOU	614	N	PHE	77	1597	2141	2675	-7	283	-191
ATOM	615	CA	PHE	77	-9.584	21.646	53.274	1.000	17.61	
ANISOU	615	CA	PHE	77	1838	2196	2656	109	328	-114
ATOM	616	C	PHE	77	-9.776	20.154	53.512	1.000	17.64	
ANISOU	616	C	PHE	77	1855	2248	2600	-68	243	-185
ATOM	617	O	PHE	77	-10.589	19.528	52.831	1.000	18.23	
ANISOU	617	O	PHE	77	1844	2488	2594	-183	357	-240
ATOM	618	CB	PHE	77	-10.698	22.383	53.998	1.000	17.70	
ANISOU	618	CB	PHE	77	1730	2515	2480	162	65	-344
ATOM	619	CG	PHE	77	-10.877	22.081	55.473	1.000	19.61	
ANISOU	619	CG	PHE	77	2405	2530	2515	195	261	-516
ATOM	620	CD1	PHE	77	-9.966	22.594	56.395	1.000	22.27	
ANISOU	620	CD1	PHE	77	2514	3523	2426	431	-23	-527
ATOM	621	CD2	PHE	77	-11.917	21.285	55.941	1.000	21.31	
ANISOU	621	CD2	PHE	77	3282	2070	2743	36	615	-288
ATOM	622	CE1	PHE	77	-10.116	22.294	57.742	1.000	21.05	
ANISOU	622	CE1	PHE	77	2719	2768	2510	171	221	-339
ATOM	623	CE2	PHE	77	-12.079	20.991	57.300	1.000	25.09	
ANISOU	623	CE2	PHE	77	2967	4120	2447	-501	625	-826
ATOM	624	CZ	PHE	77	-11.175	21.523	58.207	1.000	23.79	
ANISOU	624	CZ	PHE	77	2263	3681	3095	-1	376	-756
ATOM	625	N	THR	78	-9.022	19.631	54.490	1.000	17.64	
ANISOU	625	N	THR	78	1616	2161	2925	37	336	1
ATOM	626	CA	THR	78	-9.296	18.279	54.983	1.000	18.12	
ANISOU	626	CA	THR	78	1926	2243	2717	-157	624	-28
ATOM	627	C	THR	78	-9.291	18.316	56.505	1.000	18.66	
ANISOU	627	C	THR	78	2120	2308	2663	-367	519	-288
ATOM	628	O	THR	78	-8.335	18.821	57.095	1.000	21.42	
ANISOU	628	O	THR	78	2158	2883	3098	-432	90	177
ATOM	629	CB	THR	78	-8.252	17.242	54.521	1.000	21.00	
ANISOU	629	CB	THR	78	2973	2067	2939	113	428	-574
ATOM	630	OG1	THR	78	-8.027	17.392	53.104	1.000	21.18	
ANISOU	630	OG1	THR	78	2544	2671	2833	160	317	-773
ATOM	631	CG2	THR	78	-8.735	15.832	54.800	1.000	26.65	
ANISOU	631	CG2	THR	78	3759	2227	4141	-275	853	-618
ATOM	632	N	GLY	79	-10.311	17.804	57.181	1.000	20.36	
ANISOU	632	N	GLY	79	2669	2379	2690	-670	630	-144
ATOM	633	CA	GLY	79	-10.344	17.679	58.623	1.000	25.96	
ANISOU	633	CA	GLY	79	3871	3249	2745	-790	576	375
ATOM	634	C	GLY	79	-10.029	16.238	59.039	1.000	39.70	
ANISOU	634	C	GLY	79	6407	3542	5135	-1658	-1944	1511
ATOM	635	O	GLY	79	-10.623	15.303	58.491	1.000	31.02	
ANISOU	635	O	GLY	79	4327	3187	4272	-404	419	-75
ATOM	636	N	LEU	80	-9.069	16.055	59.936	1.000	36.07	
ANISOU	636	N	LEU	80	4380	4536	4788	1381	-564	-835
ATOM	637	CA	LEU	80	-8.634	14.713	60.340	1.000	32.52	
ANISOU	637	CA	LEU	80	3640	4083	4632	611	-502	-898
ATOM	638	C	LEU	80	-9.131	14.311	61.716	1.000	39.82	
ANISOU	638	C	LEU	80	5051	4652	5428	-128	418	-538
ATOM	639	O	LEU	80	-9.998	14.963	62.305	1.000	37.05	
ANISOU	639	O	LEU	80	5057	3807	5213	-292	666	87
ATOM	640	CB	LEU	80	-7.122	14.580	60.265	1.000	38.36	
ANISOU	640	CB	LEU	80	3821	5456	5299	1568	-33	-1406
ATOM	641	CG	LEU	80	-6.488	14.753	58.883	1.000	38.27	

ANISOU	641	CG	LEU	80	3714	5900	4926	725	-288	-2588
ATOM	642	CD1	LEU	80	-5.007	14.359	58.948	1.000	45.41	
ANISOU	642	CD1	LEU	80	2579	8505	6170	-1092	-76	37
ATOM	643	CD2	LEU	80	-7.170	13.856	57.854	1.000	40.75	
ANISOU	643	CD2	LEU	80	4296	5601	5587	872	-1965	-1793
ATOM	644	N	SER	98	-6.459	17.442	63.930	1.000	36.72	
ANISOU	644	N	SER	98	3404	6429	4118	-2114	-698	1948
ATOM	645	CA	SER	98	-5.629	17.877	62.824	1.000	39.59	
ANISOU	645	CA	SER	98	6031	5376	3635	-449	383	2177
ATOM	646	C	SER	98	-6.402	18.372	61.610	1.000	29.89	
ANISOU	646	C	SER	98	3806	3509	4040	141	640	1204
ATOM	647	O	SER	98	-7.474	17.856	61.304	1.000	38.27	
ANISOU	647	O	SER	98	4936	4300	5303	-1107	395	885
ATOM	648	CB	SER	98	-4.694	16.739	62.358	1.000	44.06	
ANISOU	648	CB	SER	98	3175	7425	6141	633	-753	2704
ATOM	649	OG	SER	98	-3.672	17.368	61.583	1.000	46.84	
ANISOU	649	OG	SER	98	3497	6502	7797	95	-408	2418
ATOM	650	N	MET	99	-5.829	19.317	60.869	1.000	28.56	
ANISOU	650	N	MET	99	5029	3458	2365	-1080	-550	546
ATOM	651	CA	MET	99	-6.426	19.941	59.700	1.000	21.44	
ANISOU	651	CA	MET	99	2284	3549	2315	-182	157	132
ATOM	652	C	MET	99	-5.376	20.229	58.624	1.000	19.16	
ANISOU	652	C	MET	99	2306	2592	2382	-433	60	137
ATOM	653	O	MET	99	-4.232	20.575	58.930	1.000	23.34	
ANISOU	653	O	MET	99	2489	3920	2460	-773	225	-410
ATOM	654	CB	MET	99	-7.164	21.209	60.105	1.000	25.20	
ANISOU	654	CB	MET	99	3172	3375	3028	-572	661	-547
ATOM	655	CG	MET	99	-8.481	20.965	60.872	1.000	25.85	
ANISOU	655	CG	MET	99	3172	3862	2787	-275	739	-782
ATOM	656	SD	MET	99	-9.251	22.517	61.389	1.000	32.21	
ANISOU	656	SD	MET	99	4405	3750	4083	-133	1580	-568
ATOM	657	CE	MET	99	-8.884	22.461	63.145	1.000	76.12	
ANISOU	657	CE	MET	99	14782	11538	2603	-3321	3478	-3241
ATOM	658	N	CYS	100	-5.778	20.094	57.361	1.000	18.85	
ANISOU	658	N	CYS	100	2434	2443	2285	-160	93	194
ATOM	659	CA	CYS	100	-4.868	20.333	56.234	1.000	18.55	
ANISOU	659	CA	CYS	100	2251	2380	2418	92	127	236
ATOM	660	C	CYS	100	-5.496	21.312	55.228	1.000	16.26	
ANISOU	660	C	CYS	100	1826	2031	2321	110	329	2
ATOM	661	O	CYS	100	-6.728	21.308	55.071	1.000	17.69	
ANISOU	661	O	CYS	100	1741	2395	2586	-69	154	-104
ATOM	662	CB	CYS	100	-4.604	18.982	55.545	1.000	18.46	
ANISOU	662	CB	CYS	100	2822	2081	2111	98	118	511
ATOM	663	SG	CYS	100	-3.243	18.974	54.329	1.000	22.76	
ANISOU	663	SG	CYS	100	2622	2968	3058	307	391	1 0
ATOM	664	N	TYR	101	-4.697	22.069	54.498	1.000	17.49	
ANISOU	664	N	TYR	101	1839	2473	2332	46	291	224
ATOM	665	CA	TYR	101	-5.117	22.874	53.373	1.000	15.38	
ANISOU	665	CA	TYR	101	1946	1939	1960	-50	90	-262
ATOM	666	C	TYR	101	-4.102	22.594	52.245	1.000	13.65	
ANISOU	666	C	TYR	101	1676	1543	1967	-2	-123	-151
ATOM	667	O	TYR	101	-2.896	22.629	52.475	1.000	15.95	
ANISOU	667	O	TYR	101	1611	2231	2217	-43	-232	-212
ATOM	668	CB	TYR	101	-5.122	24.382	53.739	1.000	19.02	
ANISOU	668	CB	TYR	101	2816	2082	2328	234	48	-519
ATOM	669	CG	TYR	101	-5.617	25.109	52.498	1.000	17.85	
ANISOU	669	CG	TYR	101	2084	1895	2804	18	-26	-231
ATOM	670	CD1	TYR	101	-6.964	25.134	52.171	1.000	18.25	
ANISOU	670	CD1	TYR	101	2042	1596	3298	29	28	-496
ATOM	671	CD2	TYR	101	-4.730	25.778	51.658	1.000	17.77	
ANISOU	671	CD2	TYR	101	2037	1611	3106	-46	-125	-127

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ATOM    672  CE1 TYR   101 -7.406  25.796  51.036 1.000 19.63
ANISOU  672  CE1 TYR   101 1977    1776    3704    88 -241  -221
ATOM    673  CE2 TYR   101 -5.147  26.386  50.478 1.000 20.46
ANISOU  673  CE2 TYR   101 2060    2608    3108   239   40 182
ATOM    674  CZ  TYR   101 -6.504  26.392  50.166 1.000 20.29
ANISOU  674  CZ  TYR   101 2187    2397    3127   -73  -353 -260
ATOM    675  OH  TYR   101 -6.932  26.995  49.000 1.000 23.34
ANISOU  675  OH  TYR   101 2790    2555    3523    -3 -641   5 2
ATOM    676  N   SER   102 -4.648  22.210  51.097 1.000 14.60
ANISOU  676  N   SER   102 1618    1890    2041   -61  -109 -477
ATOM    677  CA  SER   102 -3.797  21.792  49.980 1.000 14.52
ANISOU  677  CA  SER   102 1684    1802    2030   -108   62 -276
ATOM    678  C   SER   102 -4.011  22.670  48.747 1.000 14.99
ANISOU  678  C   SER   102 1545    1790    2361   -296  -41   2 1
ATOM    679  O   SER   102 -5.167  23.105  48.477 1.000 16.73
ANISOU  679  O   SER   102 1589    2342    2425    2  128  - 3
ATOM    680  CB  SER   102 -4.163  20.340  49.593 1.000 13.82
ANISOU  680  CB  SER   102 1692    1548    2013   174    9  -138
ATOM    681  OG  SER   102 -3.996  19.476  50.720 1.000 16.06
ANISOU  681  OG  SER   102 1886    2066    2153    97 -121   6 3
ATOM    682  N   MET   103 -2.978  22.775  47.920 1.000 14.47
ANISOU  682  N   MET   103 1568    1724    2206    51  -59 152
ATOM    683  CA  MET   103 -3.102  23.552  46.687 1.000 16.58
ANISOU  683  CA  MET   103 2194    1933    2173   331   -74  253
ATOM    684  C   MET   103 -2.150  23.013  45.608 1.000 14.41
ANISOU  684  C   MET   103 1598    1793    2083   -202  -210 6 3
ATOM    685  O   MET   103 -1.157  22.347  45.920 1.000 16.24
ANISOU  685  O   MET   103 1527    2384    2259   -61   -23  468
ATOM    686  CB  MET   103 -2.716  25.004  46.835 1.000 28.78
ANISOU  686  CB  MET   103 6537    1318    3081   859  -207 366
ATOM    687  CG  MET   103 -3.258  25.986  47.801 1.000 22.60
ANISOU  687  CG  MET   103 2531    2157    3900   -161  -57  -291
ATOM    688  SD  MET   103 -2.338  27.505  47.506 1.000 20.60
ANISOU  688  SD  MET   103 2499    1927    3400   -4 -164  -226
ATOM    689  CE  MET   103 -2.587  27.945  45.804 1.000 21.63
ANISOU  689  CE  MET   103 2319    2601    3300   308   209  -236
ATOM    690  N   GLY   104 -2.439  23.430  44.378 1.000 15.44
ANISOU  690  N   GLY   104 1468    2228    2169   -68  -120 164
ATOM    691  CA  GLY   104 -1.511  23.199  43.276 1.000 16.13
ANISOU  691  CA  GLY   104 1688    2202    2241   42 65 469
ATOM    692  C   GLY   104 -1.583  24.355  42.294 1.000 15.76
ANISOU  692  C   GLY   104 1706    1997    2286   -32  -194 388
ATOM    693  O   GLY   104 -1.987  25.478  42.653 1.000 19.06
ANISOU  693  O   GLY   104 1953    2032    3256   -71   144  333
ATOM    694  N   THR   105 -1.151  24.092  41.054 1.000 16.73
ANISOU  694  N   THR   105 1685    2385    2287   -375  -55  515
ATOM    695  CA  THR   105 -1.115  25.205  40.094 1.000 17.06
ANISOU  695  CA  THR   105 1725    2390    2369   -231  -148 577
ATOM    696  C   THR   105 -2.513  25.631  39.635 1.000 19.55
ANISOU  696  C   THR   105 1768    1817    3842   -160  -346 525
ATOM    697  O   THR   105 -2.680  26.703  39.059 1.000 22.41
ANISOU  697  O   THR   105 2262    2116    4136   -119  -520 842
ATOM    698  CB  THR   105 -0.301  24.857  38.840 1.000 17.57
ANISOU  698  CB  THR   105 1759    2877    2038   -394  -343 377
ATOM    699  OG1 THR   105 -0.865  23.675  38.217 1.000 18.66
ANISOU  699  OG1 THR   105 2035    2449    2607   -140  -458 416
ATOM    700  CG2 THR   105 1.155  24.590  39.178 1.000 18.95
ANISOU  700  CG2 THR   105 1748    2853    2601   -105  -248 296
ATOM    701  N   ALA   106 -3.507  24.751  39.741 1.000 16.52
ANISOU  701  N   ALA   106 1596    2293    2389   -180   -1 298
ATOM    702  CA  ALA   106 -4.846  25.035  39.218 1.000 16.59
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ANISOU  702  CA  ALA  106  1692    1952    2660    -214   -209  2 4 3
ATOM    703  C   ALA  106  -5.848  24.142  39.923  1.000 17.52
ANISOU  703  C   ALA  106  1651    1821    3186     26   -66  5 5 5
ATOM    704  O   ALA  106  -5.479  23.323  40.805  1.000 17.88
ANISOU  704  O   ALA  106  2038    2087    2668     59   -51  3 8 8
ATOM    705  CB  ALA  106  -4.862  24.838  37.713  1.000 20.31
ANISOU  705  CB  ALA  106  2331    2764    2620    -197   -403  4 4 0
ATOM    706  N   ASP  107  -7.149  24.329  39.717  1.000 18.00
ANISOU  706  N   ASP  107  1576    2208    3057     -77   -120  4  9
ATOM    707  CA  ASP  107  -8.217  23.535  40.344  1.000 17.46
ANISOU  707  CA  ASP  107  1563    2191    2881     -83   -472  3 6 3
ATOM    708  C   ASP  107  -8.173  23.753  41.859  1.000 17.74
ANISOU  708  C   ASP  107  1825    2044    2869     447   -269  3 6 2
ATOM    709  O   ASP  107  -8.458  22.854  42.650  1.000 18.95
ANISOU  709  O   ASP  107  1994    2230    2974     167   -133  4 0 2
ATOM    710  CB  ASP  107  -8.089  22.044  39.990  1.000 19.62
ANISOU  710  CB  ASP  107  2213    2300    2942     -394   -727  1 7 3
ATOM    711  CG  ASP  107  -8.370  21.842  38.508  1.000 20.81
ANISOU  711  CG  ASP  107  1952    3093    2862     -138   -532  - 1 4
ATOM    712  OD1 ASP  107  -9.369  22.369  37.976  1.000 25.84
ANISOU  712  OD1 ASP  107  2524    3967    3327     222   -1149  - 2 4 0
ATOM    713  OD2 ASP  107  -7.544  21.168  37.844  1.000 25.86
ANISOU  713  OD2 ASP  107  3314    2989    3523     391    -91   - 8 9
ATOM    714  N   ASN  108  -7.893  24.962  42.298  1.000 18.18
ANISOU  714  N   ASN  108  2049    2075    2786     509    189   1 5 3
ATOM    715  CA  ASN  108  -7.831  25.263  43.740  1.000 17.10
ANISOU  715  CA  ASN  108  1804    1977    2715     266    291   3 2 7
ATOM    716  C   ASN  108  -9.158  25.716  44.314  1.000 17.11
ANISOU  716  C   ASN  108  1705    2061    2734     367     44  1 4 9
ATOM    717  O   ASN  108 -10.103  26.086  43.604  1.000 20.72
ANISOU  717  O   ASN  108  2066    2377    3430     759   -248  2 4 5
ATOM    718  CB  ASN  108  -6.799  26.379  43.969  1.000 19.90
ANISOU  718  CB  ASN  108  1770    2308    3483     186    298   - 1 7 1
ATOM    719  CG  ASN  108  -5.400  25.862  43.717  1.000 17.24
ANISOU  719  CG  ASN  108  1709    2212    2628     200     68  1 8 4
ATOM    720  OD1 ASN  108  -4.986  24.850  44.277  1.000 17.42
ANISOU  720  OD1 ASN  108  2003    1984    2631     109     11  - 6 2
ATOM    721  ND2 ASN  108  -4.644  26.487  42.834  1.000 18.41
ANISOU  721  ND2 ASN  108  2083    2326    2587     -82    300   - 1 8
ATOM    722  N   LEU  109  -9.308  25.509  45.607  1.000 18.09
ANISOU  722  N   LEU  109  1795    2294    2786     349    344   1  0
ATOM    723  CA  LEU  109 -10.532  25.803  46.369  1.000 19.11
ANISOU  723  CA  LEU  109  1763    2200    3296     14  476  - 5 9 8
ATOM    724  C   LEU  109 -10.169  26.790  47.457  1.000 17.40
ANISOU  724  C   LEU  109  1682    1937    2990     251    129   - 2 0 7
ATOM    725  O   LEU  109  -9.443  26.423  48.395  1.000 21.18
ANISOU  725  O   LEU  109  2443    1922    3684     174   -520  2
ATOM    726  CB  LEU  109 -11.100  24.504  46.940  1.000 17.10
ANISOU  726  CB  LEU  109  1888    2142    2469     199    426   - 6 3 0
ATOM    727  CG  LEU  109 -11.520  23.425  45.944  1.000 18.07
ANISOU  727  CG  LEU  109  2515    1943    2409     190   -198  - 3 6 3
ATOM    728  CD1 LEU  109 -11.895  22.124  46.654  1.000 20.06
ANISOU  728  CD1 LEU  109  2842    2406    2375     -331   -175  - 2 0 0
ATOM    729  CD2 LEU  109 -12.630  23.908  45.035  1.000 25.24
ANISOU  729  CD2 LEU  109  3481    2892    3217     306   -992  - 1 1 1
ATOM    730  N   PHE  110 -10.609  28.036  47.313  1.000 17.25
ANISOU  730  N   PHE  110  1584    1926    3045     272    184   - 1 3 2
ATOM    731  CA  PHE  110 -10.235  29.071  48.277  1.000 18.20
ANISOU  731  CA  PHE  110  1751    1816    3346     169    221   - 1 6 0
ATOM    732  C   PHE  110 -11.409  29.567  49.106  1.000 19.93
ANISOU  732  C   PHE  110  2077    1609    3886     71  650  - 3 3 5
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ATOM    733  O   PHE  110 -12.433 29.948  48.494 1.000 24.64
ANISOU  733  O   PHE  110 2051    2461    4851    612   328  -779
ATOM    734  CB  PHE  110 -9.607  30.243  47.520 1.000 19.92
ANISOU  734  CB  PHE  110 2367    1876    3324    224   619  -93
ATOM    735  CG  PHE  110 -8.380  29.986  46.688 1.000 19.47
ANISOU  735  CG  PHE  110 2009    2209    3179   -321   327  -791
ATOM    736  CD1 PHE  110 -7.177  29.680  47.287 1.000 20.59
ANISOU  736  CD1 PHE  110 2071    2080    3674   -274   236  -331
ATOM    737  CD2 PHE  110 -8.437  30.035  45.299 1.000 20.19
ANISOU  737  CD2 PHE  110 2557    1914    3200    112   543  -289
ATOM    738  CE1 PHE  110 -6.034  29.454  46.559 1.000 21.06
ANISOU  738  CE1 PHE  110 2020    2309    3673   -386   165  -622
ATOM    739  CE2 PHE  110 -7.277  29.811  44.547 1.000 20.77
ANISOU  739  CE2 PHE  110 2495    2138    3257    197   504  -398
ATOM    740  CZ  PHE  110 -6.081  29.518  45.175 1.000 22.42
ANISOU  740  CZ  PHE  110 2747    2092    3678    531   339  -357
ATOM    741  N   PRO  111 -11.238 29.718  50.416 1.000 22.11
ANISOU  741  N   PRO  111 2250    2153    3996    -72   871  -620
ATOM    742  CA  PRO  111 -12.287 30.389  51.195 1.000 28.23
ANISOU  742  CA  PRO  111 3895    2210    4621    698   1514 -671
ATOM    743  C   PRO  111 -12.333 31.866  50.784 1.000 30.57
ANISOU  743  C   PRO  111 4528    2026    5061    410   410  -1041
ATOM    744  O   PRO  111 -11.390 32.340  50.115 1.000 31.71
ANISOU  744  O   PRO  111 4040    2236    5774   -179  -597  -12
ATOM    745  CB  PRO  111 -11.799 30.250  52.627 1.000 33.20
ANISOU  745  CB  PRO  111 5609    2702    4303    671   1671 -790
ATOM    746  CG  PRO  111 -10.646 29.326  52.647 1.000 26.04
ANISOU  746  CG  PRO  111 2742    3316    3835   -931  1324 -192
ATOM    747  CD  PRO  111 -10.161 29.149  51.230 1.000 22.15
ANISOU  747  CD  PRO  111 2587    2307    3522   -471   541  -623
ATOM    748  N   SER  112 -13.337 32.641  51.150 1.000 42.13
ANISOU  748  N   SER  112 7176    2716    6115    2074  1731 -526
ATOM    749  CA  SER  112 -13.368 34.026  50.672 1.000 44.05
ANISOU  749  CA  SER  112 6799    2255    7684    1107  -485 -826
ATOM    750  C   SER  112 -13.262 34.157  49.149 1.000 68.28
ANISOU  750  C   SER  112 13632   4498    7812   -1855 -2077  1301
ATOM    751  O   SER  112 -12.347 34.825  48.646 1.000 95.18
ANISOU  751  O   SER  112 15991   11425   8747   -4337 -70  1985
ATOM    752  CB  SER  112 -12.493 35.069  51.349 1.000 39.31
ANISOU  752  CB  SER  112 2247    4535    8153    580   1662 -1437
ATOM    753  OG  SER  112 -11.474 34.624  52.213 1.000 37.49
ANISOU  753  OG  SER  112 7213    2453    4579    806   747  -1152
ATOM    754  N   ASP  114 -9.515  37.322  49.945 1.000 36.40
ANISOU  754  N   ASP  114 3476    2118    8237    1254  403  1484
ATOM    755  CA  ASP  114 -8.205  37.586  50.600 1.000 30.79
ANISOU  755  CA  ASP  114 3503    2856    5340    1229  1240 996
ATOM    756  C   ASP  114 -7.242  36.402  50.648 1.000 26.16
ANISOU  756  C   ASP  114 2581    2404    4955    601   1114 804
ATOM    757  O   ASP  114 -6.031  36.458  50.338 1.000 25.45
ANISOU  757  O   ASP  114 2302    2503    4866    -43   602  131
ATOM    758  CB  ASP  114 -8.595  37.874  52.075 1.000 43.68
ANISOU  758  CB  ASP  114 7509    2783    6304    1157  2727 -210
ATOM    759  CG  ASP  114 -7.391  38.386  52.835 1.000 46.96
ANISOU  759  CG  ASP  114 9259    3225    5359    2517  519  107
ATOM    760  OD1 ASP  114 -6.487  38.959  52.189 1.000 83.49
ANISOU  760  OD1 ASP  114 13724   9866    8132   -6354 650  -3056
ATOM    761  OD2 ASP  114 -7.370  38.262  54.071 1.000113.59
ANISOU  761  OD2 ASP  114 27880   10550   4730   -6984 -159 -2575
ATOM    762  N   PHE  115 -7.831  35.323  51.153 1.000 22.32
ANISOU  762  N   PHE  115 2620    2062    3799    204   954  -114
ATOM    763  CA  PHE  115 -7.115  34.026  51.183 1.000 22.69
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ANISOU	763	CA	PHE	115	2765	1909	3947	118	1093	-187
ATOM	764	C	PHE	115	-6.502	33.754	49.816	1.000	21.49	
ANISOU	764	C	PHE	115	2146	2316	3702	305	559	-255
ATOM	765	O	PHE	115	-5.328	33.362	49.758	1.000	20.51	
ANISOU	765	O	PHE	115	2153	2011	3627	323	488	-158
ATOM	766	CB	PHE	115	-8.096	32.928	51.638	1.000	20.76	
ANISOU	766	CB	PHE	115	2369	1946	3574	-3	563	-473
ATOM	767	CG	PHE	115	-7.496	31.590	51.998	1.000	20.23	
ANISOU	767	CG	PHE	115	2369	1854	3463	-155	629	-377
ATOM	768	CD1	PHE	115	-6.915	30.756	51.041	1.000	20.35	
ANISOU	768	CD1	PHE	115	2572	1786	3372	-195	112	-756
ATOM	769	CD2	PHE	115	-7.474	31.152	53.309	1.000	21.11	
ANISOU	769	CD2	PHE	115	2802	1932	3287	-113	17	-689
ATOM	770	CE1	PHE	115	-6.351	29.538	51.325	1.000	21.09	
ANISOU	770	CE1	PHE	115	2502	1728	3784	-295	471	-538
ATOM	771	CE2	PHE	115	-6.938	29.901	53.623	1.000	27.40	
ANISOU	771	CE2	PHE	115	5012	1955	3445	444	43	-572
ATOM	772	CZ	PHE	115	-6.332	29.110	52.655	1.000	24.92	
ANISOU	772	CZ	PHE	115	3356	1889	4222	50	1519	221
ATOM	773	N	GLU	116	-7.301	33.768	48.757	1.000	21.64	
ANISOU	773	N	GLU	116	2396	1835	3990	338	261	-13
ATOM	774	CA	GLU	116	-6.750	33.424	47.444	1.000	20.90	
ANISOU	774	CA	GLU	116	2235	1965	3742	224	74	116
ATOM	775	C	GLU	116	-5.550	34.262	47.054	1.000	20.32	
ANISOU	775	C	GLU	116	1978	1899	3845	439	-108	448
ATOM	776	O	GLU	116	-4.544	33.679	46.604	1.000	20.18	
ANISOU	776	O	GLU	116	2209	2147	3312	424	73	139
ATOM	777	CB	GLU	116	-7.851	33.561	46.385	1.000	24.22	
ANISOU	777	CB	GLU	116	2425	2638	4139	-467	-237	519
ATOM	778	CG	GLU	116	-7.339	33.331	44.980	1.000	23.27	
ANISOU	778	CG	GLU	116	2425	2465	3952	-7	-494	750
ATOM	779	CD	GLU	116	-8.401	33.273	43.910	1.000	25.02	
ANISOU	779	CD	GLU	116	2695	2703	4107	-510	-739	1509
ATOM	780	OE1	GLU	116	-9.617	33.306	44.207	1.000	34.83	
ANISOU	780	OE1	GLU	116	2466	4606	6161	-203	-928	1566
ATOM	781	OE2	GLU	116	-8.001	33.030	42.763	1.000	40.92	
ANISOU	781	OE2	GLU	116	4389	7172	3988	-24	-968	693
ATOM	782	N	ARG	117	-5.549	35.571	47.300	1.000	20.60	
ANISOU	782	N	ARG	117	2299	1811	3718	382	-10	469
ATOM	783	CA	ARG	117	-4.374	36.374	46.866	1.000	22.65	
ANISOU	783	CA	ARG	117	2230	1791	4586	351	107	153
ATOM	784	C	ARG	117	-3.163	35.911	47.648	1.000	21.87	
ANISOU	784	C	ARG	117	2269	1865	4178	252	179	97
ATOM	785	O	ARG	117	-2.060	35.789	47.102	1.000	22.10	
ANISOU	785	O	ARG	117	2197	2270	3931	216	41	205
ATOM	786	CB	ARG	117	-4.682	37.861	47.105	1.000	29.47	
ANISOU	786	CB	ARG	117	2849	1691	6658	259	-555	-1
ATOM	787	CG	ARG	117	-3.485	38.815	47.046	1.000	40.24	
ANISOU	787	CG	ARG	117	3905	2567	8818	-819	-1330	-476
ATOM	788	CD	ARG	117	-3.745	40.160	47.716	1.000	52.75	
ANISOU	788	CD	ARG	117	4698	2848	12496	-595	-1653	-1669
ATOM	789	NE	ARG	117	-3.934	39.987	49.155	1.000	68.00	
ANISOU	789	NE	ARG	117	8247	4719	12872	422	1842	-3441
ATOM	790	CZ	ARG	117	-3.166	40.448	50.126	1.000	78.38	
ANISOU	790	CZ	ARG	117	13026	5658	11097	283	448	-2498
ATOM	791	NH1	ARG	117	-2.097	41.186	49.849	1.000	89.01	
ANISOU	791	NH1	ARG	117	14218	11488	8115	-3550	-6761	3577
ATOM	792	NH2	ARG	117	-3.479	40.189	51.391	1.000	82.58	
ANISOU	792	NH2	ARG	117	16575	2856	11947	2617	2551	-2095
ATOM	793	N	ILE	118	-3.334	35.759	48.954	1.000	21.70	
ANISOU	793	N	ILE	118	2319	1797	4127	311	271	-314

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ATOM    794  CA  ILE  118  -2.206   35.425   49.810 1.000 20.99
ANISOU  794  CA  ILE  118  2546     1624     3805    408    294   -470
ATOM    795  C   ILE  118  -1.596   34.073   49.475 1.000 18.79
ANISOU  795  C   ILE  118  2222     1534     3384    218    573   -201
ATOM    796  O   ILE  118  -0.409   33.858   49.323 1.000 17.27
ANISOU  796  O   ILE  118  2194     1663     2707    283    351   -136
ATOM    797  CB  ILE  118  -2.588   35.542   51.293 1.000 22.62
ANISOU  797  CB  ILE  118  2702     1997     3895    276    416   -856
ATOM    798  CG1 ILE  118  -2.916   36.995   51.700 1.000 27.54
ANISOU  798  CG1 ILE  118  5077     1801     3587    503    768   -401
ATOM    799  CG2 ILE  118  -1.552   34.940   52.206 1.000 23.59
ANISOU  799  CG2 ILE  118  3084     2274     3606    183    254   -818
ATOM    800  CD1 ILE  118  -3.493   37.115   53.096 1.000 29.35
ANISOU  800  CD1 ILE  118  5212     2054     3885    558   1114   -645
ATOM    801  N   TRP  119  -2.454   33.069   49.341 1.000 17.93
ANISOU  801  N   TRP  119  2378     1605     2828    147    -80   -269
ATOM    802  CA  TRP  119  -2.035   31.688   49.103 1.000 16.57
ANISOU  802  CA  TRP  119  2126     1538     2630    152    -25    -16
ATOM    803  C   TRP  119  -1.575   31.476   47.676 1.000 16.98
ANISOU  803  C   TRP  119  2126     1723     2604    269    -91    -51
ATOM    804  O   TRP  119  -0.700   30.640   47.455 1.000 17.58
ANISOU  804  O   TRP  119  1892     1674     3113    135    181     63
ATOM    805  CB  TRP  119  -3.127   30.690   49.591 1.000 18.32
ANISOU  805  CB  TRP  119  2156     1789     3014    -34      5    -7
ATOM    806  CG  TRP  119  -2.934   30.457   51.082 1.000 18.27
ANISOU  806  CG  TRP  119  2208     1711     3025     86    349     56
ATOM    807  CD1 TRP  119  -3.354   31.273   52.103 1.000 20.36
ANISOU  807  CD1 TRP  119  2624     2029     3083    156    276   -153
ATOM    808  CD2 TRP  119  -2.213   29.383   51.683 1.000 18.61
ANISOU  808  CD2 TRP  119  2049     2055     2967    134    263    110
ATOM    809  NE1 TRP  119  -2.955   30.773   53.323 1.000 20.55
ANISOU  809  NE1 TRP  119  2471     2229     3109     92    266   -106
ATOM    810  CE2 TRP  119  -2.260   29.603   53.073 1.000 20.21
ANISOU  810  CE2 TRP  119  2529     2258     2893    180    754    297
ATOM    811  CE3 TRP  119  -1.576   28.258   51.147 1.000 18.29
ANISOU  811  CE3 TRP  119  2258     1714     2977     42    -70    -20
ATOM    812  CZ2 TRP  119  -1.636   28.728   53.981 1.000 21.97
ANISOU  812  CZ2 TRP  119  2876     2526     2945    384     51   -106
ATOM    813  CZ3 TRP  119  -0.968   27.375   52.045 1.000 19.35
ANISOU  813  CZ3 TRP  119  2576     2028     2750    187    415    299
ATOM    814  CH2 TRP  119  -1.026   27.618   53.442 1.000 21.67
ANISOU  814  CH2 TRP  119  3033     2379     2823    350    250     97
ATOM    815  N   THR  120  -2.129   32.192   46.701 1.000 16.93
ANISOU  815  N   THR  120  2023     1833     2577    122   -112     18
ATOM    816  CA  THR  120  -1.598   32.086   45.342 1.000 17.85
ANISOU  816  CA  THR  120  1915     2469     2398    222   -371   -324
ATOM    817  C   THR  120  -0.169   32.587   45.288 1.000 17.15
ANISOU  817  C   THR  120  2031     1855     2629    241   -155    192
ATOM    818  O   THR  120   0.700   31.960   44.674 1.000 18.67
ANISOU  818  O   THR  120  1996     1887     3212    389   -131    177
ATOM    819  CB  THR  120  -2.487   32.865   44.344 1.000 18.10
ANISOU  819  CB  THR  120  1951     2204     2720     28    -93    345
ATOM    820  OG1 THR  120  -3.773   32.238   44.284 1.000 20.49
ANISOU  820  OG1 THR  120  1807     2801     3179     59   -363    558
ATOM    821  CG2 THR  120  -1.919   32.803   42.933 1.000 22.46
ANISOU  821  CG2 THR  120  2438     3266     2830    475    118    705
ATOM    822  N   GLN  121   0.094   33.708   45.956 1.000 18.62
ANISOU  822  N   GLN  121  2180     1657     3237    123    -94    213
ATOM    823  CA  GLN  121   1.466   34.232   45.993 1.000 18.15
ANISOU  823  CA  GLN  121  2077     1698     3119     77     96    520
ATOM    824  C   GLN  121   2.412   33.284   46.718 1.000 17.04
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ANISOU  824  C   GLN  121  2022   1431   3019    192    234   223
ATOM    825  O   GLN  121  3.510  33.047 46.270  1.000  19.32
ANISOU  825  O   GLN  121  1894   1800   3645    93    246   129
ATOM    826  CB  GLN  121  1.490  35.579 46.756  1.000  22.90
ANISOU  826  CB  GLN  121  2520   1479   4702    327   -812   271
ATOM    827  CG  GLN  121  2.888  36.159 46.871  1.000  27.04
ANISOU  827  CG  GLN  121  2949   2062   5262   -346   -400   132
ATOM    828  CD  GLN  121  3.530  36.511 45.535  1.000  31.94
ANISOU  828  CD  GLN  121  3307   2733   6097    983   1031     9     9
ATOM    829  OE1 GLN  121  4.660  36.085 45.247  1.000  62.76
ANISOU  829  OE1 GLN  121  3009   9570  11267   1758   2366  2029
ATOM    830  NE2 GLN  121  2.859  37.306 44.716  1.000  55.89
ANISOU  830  NE2 GLN  121  6516   7728   6993   2815   1745  3249
ATOM    831  N   TYR  122  1.997  32.791 47.871  1.000  16.87
ANISOU  831  N   TYR  122  2389   1518   2501     71   -161    -54
ATOM    832  CA  TYR  122  2.795  31.881 48.683  1.000  17.97
ANISOU  832  CA  TYR  122  2564   1600   2666    176   -224    -56
ATOM    833  C   TYR  122  3.080  30.600 47.909  1.000  16.83
ANISOU  833  C   TYR  122  1870   1460   3065    -31    -57    -98
ATOM    834  O   TYR  122  4.224  30.129 47.823  1.000  17.67
ANISOU  834  O   TYR  122  1891   1952   2872    189   -220   126
ATOM    835  CB  TYR  122  2.018  31.522 49.960  1.000  18.01
ANISOU  835  CB  TYR  122  2526   1821   2495      2   -325    -55
ATOM    836  CG  TYR  122  2.753  30.619 50.898  1.000  17.89
ANISOU  836  CG  TYR  122  2332   1695   2769    255   -147    -51
ATOM    837  CD1 TYR  122  4.058  30.901 51.323  1.000  21.71
ANISOU  837  CD1 TYR  122  2883   2101   3267   -257   -913     3     4
ATOM    838  CD2 TYR  122  2.107  29.496 51.415  1.000  21.29
ANISOU  838  CD2 TYR  122  2428   2026   3634    128   -267   468
ATOM    839  CE1 TYR  122  4.680  30.037 52.212  1.000  21.27
ANISOU  839  CE1 TYR  122  2681   2045   3356    140   -725   -210
ATOM    840  CE2 TYR  122  2.746  28.637 52.290  1.000  24.50
ANISOU  840  CE2 TYR  122  3376   1876   4057   -292  -1163   506
ATOM    841  CZ  TYR  122  4.043  28.914 52.675  1.000  22.16
ANISOU  841  CZ  TYR  122  3161   1881   3379     95   -909   -128
ATOM    842  OH  TYR  122  4.699  28.079 53.566  1.000  23.72
ANISOU  842  OH  TYR  122  3471   2398   3142     52  -1005    -56
ATOM    843  N   PHE  123  2.074  30.023 47.253  1.000  16.21
ANISOU  843  N   PHE  123  1794   1571   2793     49    -66    -54
ATOM    844  CA  PHE  123  2.347  28.843 46.397  1.000  15.71
ANISOU  844  CA  PHE  123  1622   1800   2548     34   -142   -103
ATOM    845  C   PHE  123  3.378  29.188 45.337  1.000  15.96
ANISOU  845  C   PHE  123  1681   1304   3078     42     90     3
ATOM    846  O   PHE  123  4.276  28.375 45.037  1.000  15.47
ANISOU  846  O   PHE  123  1703   1437   2739     54     14    -24
ATOM    847  CB  PHE  123  1.036  28.309 45.779  1.000  15.07
ANISOU  847  CB  PHE  123  1460   1364   2904    209   -148     1
ATOM    848  CG  PHE  123  1.241  27.104 44.879  1.000  17.41
ANISOU  848  CG  PHE  123  2090   1620   2906    -39   -179   -238
ATOM    849  CD1 PHE  123  1.170  25.831 45.452  1.000  17.41
ANISOU  849  CD1 PHE  123  1680   1439   3494     72   -119    -255
ATOM    850  CD2 PHE  123  1.490  27.259 43.513  1.000  18.22
ANISOU  850  CD2 PHE  123  1723   2331   2870    -96   -216   -372
ATOM    851  CE1 PHE  123  1.419  24.740 44.636  1.000  19.15
ANISOU  851  CE1 PHE  123  2112   1766   3397    212   -540   -536
ATOM    852  CE2 PHE  123  1.722  26.144 42.717  1.000  19.63
ANISOU  852  CE2 PHE  123  1901   2476   3083   -134   -261   -632
ATOM    853  CZ  PHE  123  1.635  24.868 43.274  1.000  19.40
ANISOU  853  CZ  PHE  123  1525   2424   3421    385   -529   -490
ATOM    854  N   ASP  124  3.164  30.304 44.636  1.000  16.86
ANISOU  854  N   ASP  124  1947   1466   2992    -23   -110   124
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ATOM    855  CA  ASP  124 4.060   30.640  43.544 1.000 17.82
ANISOU  855  CA  ASP  124 2103    1747    2921    405   -24  314
ATOM    856  C   ASP  124 5.490   30.733  44.024 1.000 17.52
ANISOU  856  C   ASP  124 1999    1439    3219    181   94  8  9
ATOM    857  O   ASP  124 6.402   30.324  43.317 1.000 17.18
ANISOU  857  O   ASP  124 2086    1427    3015    34 181 1 7 7
ATOM    858  CB  AASP 124 3.639   31.997  42.942 0.534 21.77
ANISOU  858  CB  AASP 124 3475    2089    2706    642   -372 5 9 7
ATOM    859  CG  AASP 124 4.381   32.304  41.659 0.534 19.28
ANISOU  859  CG  AASP 124 2376    1982    2967    173   -553 4 9 5
ATOM    860  OD1 AASP 124 4.223   31.538  40.678 0.534 21.03
ANISOU  860  OD1 AASP 124 2189    2636    3164    -28   76 2 1
ATOM    861  OD2 AASP 124 5.068   33.348  41.639 0.534 24.96
ANISOU  861  OD2 AASP 124 3681    2052    3752    -296  -1067  8 8 9
ATOM    862  CB  BASP 124 3.632   31.975  42.908 0.466 19.67
ANISOU  862  CB  BASP 124 2559    1993    2923    1003  673  4 4 6
ATOM    863  CG  BASP 124 2.368   31.849  42.089 0.466 22.78
ANISOU  863  CG  BASP 124 3552    3217    1889    872   177  1175
ATOM    864  OD1 BASP 124 2.021   30.781  41.545 0.466 27.78
ANISOU  864  OD1 BASP 124 2138    3932    4483    100   503  3 4 7
ATOM    865  OD2 BASP 124 1.703   32.893  41.902 0.466 29.73
ANISOU  865  OD2 BASP 124 3845    3804    3646    1239  -312 1644
ATOM    866  N   ARG  125 5.669   31.416  45.153 1.000 16.65
ANISOU  866  N   ARG  125 1942    1350    3032    276   139  2 7 6
ATOM    867  CA  ARG  125 7.038   31.528  45.646 1.000 17.58
ANISOU  867  CA  ARG  125 1918    1819    2944    98 177 2 4 1
ATOM    868  C   ARG  125 7.662   30.188  45.992 1.000 17.38
ANISOU  868  C   ARG  125 1544    1777    3282    -42   40  2 7 3
ATOM    869  O   ARG  125 8.841   29.942  45.754 1.000 18.26
ANISOU  869  O   ARG  125 1639    1669    3631    -97   91  -2 3 3
ATOM    870  CB  ARG  125 7.062   32.468  46.851 1.000 20.45
ANISOU  870  CB  ARG  125 2219    2162    3387    -244  450  -2 7 4
ATOM    871  CG  ARG  125 6.860   33.916  46.344 1.000 28.23
ANISOU  871  CG  ARG  125 3178    2007    5542    147   666  -2 2 2
ATOM    872  CD  ARG  125 6.693   34.891  47.477 1.000 31.76
ANISOU  872  CD  ARG  125 3065    2279    6725    -628  1455  -9 9 3
ATOM    873  NE  ARG  125 6.496   36.221  46.932 1.000 40.81
ANISOU  873  NE  ARG  125 3332    2095    10080   -169  1790  -6 9 4
ATOM    874  CZ  ARG  125 5.970   37.229  47.628 1.000 43.42
ANISOU  874  CZ  ARG  125 4531    2891    9076    839   2072  -1 8 8
ATOM    875  NH1 ARG  125 5.551   37.025  48.866 1.000 38.62
ANISOU  875  NH1 ARG  125 3999    2858    7816    -858  61  -7 0 0
ATOM    876  NH2 ARG  125 5.858   38.382  47.006 1.000 42.11
ANISOU  876  NH2 ARG  125 5319    2652    8030    908   1627  -6 8 1
ATOM    877  N   GLN  126 6.884   29.282  46.557 1.000 15.28
ANISOU  877  N   GLN  126 1876    1527    2404    -70   13  -6 0
ATOM    878  CA  GLN  126 7.376   27.929  46.853 1.000 15.37
ANISOU  878  CA  GLN  126 1726    1625    2488    -54  -312 2  0
ATOM    879  C   GLN  126 7.649   27.150  45.578 1.000 14.21
ANISOU  879  C   GLN  126 1643    1268    2488    -75  -398 7  1
ATOM    880  O   GLN  126 8.682   26.462  45.496 1.000 15.36
ANISOU  880  O   GLN  126 1531    1554    2753    -37  -316 5  3
ATOM    881  CB  GLN  126 6.356   27.158  47.702 1.000 17.40
ANISOU  881  CB  GLN  126 2034    1313    3264    158   293  4  3
ATOM    882  CG  GLN  126 6.336   27.634  49.150 1.000 26.14
ANISOU  882  CG  GLN  126 4503    1690    3739    431   1908  -7 3 2
ATOM    883  CD  GLN  126 5.208   26.998  49.891 1.000 21.95
ANISOU  883  CD  GLN  126 2957    2670    2713    0  -123  1 0 2
ATOM    884  OE1 GLN  126 4.051   27.372  49.730 1.000 42.52
ANISOU  884  OE1 GLN  126 2994    5747    7416    -62  -1272  3 1 4 7
ATOM    885  NE2 GLN  126 5.524   26.003  50.691 1.000 28.32
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ANISOU  885  NE2 GLN  126 2867    3971    3922   -184   -780 1311
ATOM    886  N   TYR  127  6.797  27.287  44.574 1.000 14.52
ANISOU  886  N   TYR  127  1629    1438    2448   -41    -373  -36
ATOM    887  CA  TYR  127  7.039  26.554  43.317 1.000 13.93
ANISOU  887  CA  TYR  127  1563    1455    2277   -136   -234  150
ATOM    888  C   TYR  127  8.289  27.091  42.624 1.000 14.54
ANISOU  888  C   TYR  127  1461    1318    2745    24  -195   190
ATOM    889  O   TYR  127  9.133  26.345  42.140 1.000 14.39
ANISOU  889  O   TYR  127  1611    1580    2277    34  -252     9
ATOM    890  CB  TYR  127  5.801  26.676  42.435 1.000 14.00
ANISOU  890  CB  TYR  127  1510    1549    2258    29  -180   -70
ATOM    891  CG  TYR  127  5.752  25.795  41.202 1.000 12.33
ANISOU  891  CG  TYR  127  1315    1037    2334   -34   -187    45
ATOM    892  CD1 TYR  127  6.483  24.626  41.024 1.000 14.05
ANISOU  892  CD1 TYR  127  1810    1158    2371     7   -84    -8
ATOM    893  CD2 TYR  127  4.837  26.086  40.206 1.000 15.71
ANISOU  893  CD2 TYR  127  1936    1548    2484    55  -513    21
ATOM    894  CE1 TYR  127  6.382  23.829  39.899 1.000 13.10
ANISOU  894  CE1 TYR  127  1450     999    2529   -101   -227   -62
ATOM    895  CE2 TYR  127  4.661  25.322  39.071 1.000 15.07
ANISOU  895  CE2 TYR  127  1928    1620    2177    158   -342   197
ATOM    896  CZ  TYR  127  5.440  24.179  38.934 1.000 13.71
ANISOU  896  CZ  TYR  127  1617    1348    2245   -146   -106   246
ATOM    897  OH  TYR  127  5.337  23.386  37.811 1.000 15.04
ANISOU  897  OH  TYR  127  1682    1755    2279    -87    -60    53
ATOM    898  N   THR  128  8.467  28.412  42.616 1.000 14.69
ANISOU  898  N   THR  128  1813    1324    2446   -154   -217   268
ATOM    899  CA  THR  128  9.673  28.984  42.011 1.000 14.67
ANISOU  899  CA  THR  128  1867    1469    2238    -98    -32   195
ATOM    900  C   THR  128 10.921  28.552  42.736 1.000 14.68
ANISOU  900  C   THR  128  1794    1318    2466    59  -123   -285
ATOM    901  O   THR  128 11.900  28.166  42.062 1.000 15.45
ANISOU  901  O   THR  128  1715    1487    2667   -259   153     71
ATOM    902  CB  THR  128  9.572  30.544  42.069 1.000 16.02
ANISOU  902  CB  THR  128  2043    1348    2695    -79    59    479
ATOM    903  OG1 THR  128  8.519  30.849  41.162 1.000 19.14
ANISOU  903  OG1 THR  128  2226    2038    3008    195   -23    545
ATOM    904  CG2 THR  128 10.835  31.187  41.582 1.000 19.03
ANISOU  904  CG2 THR  128  2107    1329    3793    125   311    618
ATOM    905  N   ALA  129 10.933  28.564  44.085 1.000 14.21
ANISOU  905  N   ALA  129  1708    1266    2424   -137   -256  -181
ATOM    906  CA  ALA  129 12.108  28.110  44.836 1.000 15.08
ANISOU  906  CA  ALA  129  1670    1435    2624   -118   -210  -225
ATOM    907  C   ALA  129 12.389  26.643  44.562 1.000 14.37
ANISOU  907  C   ALA  129  1706    1299    2457   -159   -203   157
ATOM    908  O   ALA  129 13.552  26.238  44.445 1.000 14.10
ANISOU  908  O   ALA  129  1758    1464    2137     -5   -244   -148
ATOM    909  CB  ALA  129 11.887  28.313  46.313 1.000 17.08
ANISOU  909  CB  ALA  129  2132    1851    2506   -183   -514  -239
ATOM    910  N   SER  130 11.343  25.819  44.553 1.000 14.18
ANISOU  910  N   SER  130  1884    1237    2267   -224   -257   173
ATOM    911  CA  SER  130 11.487  24.375  44.351 1.000 15.44
ANISOU  911  CA  SER  130  1840    1219    2807   -115   -135    -7
ATOM    912  C   SER  130 12.072  24.114  42.965 1.000 14.45
ANISOU  912  C   SER  130  1345    1481    2665    78  -796   -209
ATOM    913  O   SER  130 13.037  23.329  42.807 1.000 14.43
ANISOU  913  O   SER  130  1327    1382    2773    -74   -246   172
ATOM    914  CB  SER  130 10.120  23.677  44.663 1.000 17.54
ANISOU  914  CB  SER  130  1555    1225    3884   -379   -647   126
ATOM    915  OG  SER  130  9.268  23.888  43.558 1.000 27.32
ANISOU  915  OG  SER  130  2321    3168    4893     11 -1207  865
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ATOM    916  N   ARG  131  11.555  24.772  41.909 1.000 14.47
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ATOM    917  CA  ARG  131  12.163  24.598  40.592 1.000 14.91
ANISOU  917  CA  ARG  131  1689    1452    2525    -4  -526  -341
ATOM    918  C   ARG  131  13.605  25.079  40.566 1.000 14.05
ANISOU  918  C   ARG  131  1772    1435    2132    -72   -381 -173
ATOM    919  O   ARG  131  14.448  24.438  39.912 1.000 15.14
ANISOU  919  O   ARG  131  1829    1658    2267    -109  -170 -230
ATOM    920  CB  ARG  131  11.349  25.316  39.514 1.000 15.77
ANISOU  920  CB  ARG  131  1720    1613    2660    -54   -493  -94
ATOM    921  CG  ARG  131  9.970   24.737  39.251 1.000 16.08
ANISOU  921  CG  ARG  131  1703    1695    2711    -13   -647 -141
ATOM    922  CD  ARG  131  9.326   25.390  38.017 1.000 26.56
ANISOU  922  CD  ARG  131  3589    2689    3813   -1037 -2156  745
ATOM    923  NE  ARG  131  9.327   26.831  37.918 1.000 25.91
ANISOU  923  NE  ARG  131  2856    2814    4174    -979 -1682  1413
ATOM    924  CZ  ARG  131  8.472   27.716  38.413 1.000 31.86
ANISOU  924  CZ  ARG  131  3546    2861    5697    -254 -1094  2201
ATOM    925  NH1 ARG  131  7.467   27.244  39.138 1.000 31.34
ANISOU  925  NH1 ARG  131  5127    3636    3144   -1474 -458 -115
ATOM    926  NH2 ARG  131  8.633   29.032  38.235 1.000 40.12
ANISOU  926  NH2 ARG  131  3500    2831    8912    -582 -1620  1802
ATOM    927  N   ALA  132  13.893   26.186  41.236 1.000 13.42
ANISOU  927  N   ALA  132  1683    1385    2033    -85   -652  -24
ATOM    928  CA  ALA  132  15.246   26.751  41.128 1.000 13.38
ANISOU  928  CA  ALA  132  1617    1443    2022    -16   -499  -79
ATOM    929  C   ALA  132  16.225   25.808  41.837 1.000 13.37
ANISOU  929  C   ALA  132  1398    1365    2316    -93   -253  154
ATOM    930  O   ALA  132  17.306   25.586  41.328 1.000 14.43
ANISOU  930  O   ALA  132  1459    1772    2251    -91   -240  106
ATOM    931  CB  ALA  132  15.275   28.084  41.859 1.000 16.52
ANISOU  931  CB  ALA  132  2019    1243    3014    -199  -366 -236
ATOM    932  N   VAL  133  15.893   25.248  42.996 1.000 13.62
ANISOU  932  N   VAL  133  1522    1515    2139    -63   -362  86
ATOM    933  CA  VAL  133  16.839   24.363  43.689 1.000 14.86
ANISOU  933  CA  VAL  133  1902    1566    2179    120   -491  -27
ATOM    934  C   VAL  133  16.923   23.073  42.890 1.000 15.04
ANISOU  934  C   VAL  133  1390    1633    2690    -9  -220  -218
ATOM    935  O   VAL  133  18.036   22.538  42.773 1.000 15.49
ANISOU  935  O   VAL  133  1442    1814    2630    63  -193  -99
ATOM    936  CB  VAL  133  16.545   24.170  45.187 1.000 14.61
ANISOU  936  CB  VAL  133  1528    1789    2234    -45  -391  210
ATOM    937  CG1 VAL  133  15.362   23.267  45.453 1.000 16.78
ANISOU  937  CG1 VAL  133  1544    2123    2708    -249  -437  -81
ATOM    938  CG2 VAL  133  17.766   23.650  45.950 1.000 16.51
ANISOU  938  CG2 VAL  133  1769    1942    2561    -61   -831  64
ATOM    939  N   ALA  134  15.840   22.583  42.270 1.000 13.73
ANISOU  939  N   ALA  134  1605    1451    2160    -75   -397  185
ATOM    940  CA  ALA  134  15.951   21.369  41.451 1.000 14.21
ANISOU  940  CA  ALA  134  1505    1796    2100    116   -570  -33
ATOM    941  C   ALA  134  16.838   21.618  40.246 1.000 15.07
ANISOU  941  C   ALA  134  1766    1511    2450    43   -292  17
ATOM    942  O   ALA  134  17.600   20.750  39.800 1.000 14.36
ANISOU  942  O   ALA  134  1555    1567    2333    -60   -286  52
ATOM    943  CB  ALA  134  14.535   20.925  41.032 1.000 16.97
ANISOU  943  CB  ALA  134  1472    1943    3031    12  -470  -299
ATOM    944  N   ARG  135  16.752   22.808  39.631 1.000 15.48
ANISOU  944  N   ARG  135  1848    1600    2433    14  -341  -2
ATOM    945  CA  ARG  135  17.618   23.153  38.508 1.000 16.07
ANISOU  945  CA  ARG  135  2139    1230    2735   -138  -189  35
ATOM    946  C   ARG  135  19.082   23.057  38.955 1.000 15.70
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ANISOU	946	C	ARG	135	2059	1370	2535	-134	27	1	2	1
ATOM	947	O	ARG	135	19.928	22.604	38.176	1.000	18.07			
ANISOU	947	O	ARG	135	2317	2014	2534	108	256	2	7	6
ATOM	948	CB	ARG	135	17.277	24.586	38.096	1.000	21.96			
ANISOU	948	CB	ARG	135	3936	1640	2767	-4	-1480	6	1	4
ATOM	949	CG	ARG	135	17.571	24.989	36.689	1.000	27.53			
ANISOU	949	CG	ARG	135	5112	2482	2866	816	-610	5	9	5
ATOM	950	CD	ARG	135	16.930	26.332	36.393	1.000	23.27			
ANISOU	950	CD	ARG	135	3548	2428	2865	148	61	1	3	7	1
ATOM	951	NE	ARG	135	15.551	26.309	35.928	1.000	22.68			
ANISOU	951	NE	ARG	135	3488	1575	3556	-116	167	2	9	7
ATOM	952	CZ	ARG	135	14.520	26.858	36.562	1.000	25.90			
ANISOU	952	CZ	ARG	135	3801	2165	3874	921	-506	-	1	7	9
ATOM	953	NH1	ARG	135	14.708	27.515	37.702	1.000	23.50			
ANISOU	953	NH1	ARG	135	3582	2378	2969	94	137	5	3	2
ATOM	954	NH2	ARG	135	13.287	26.758	36.035	1.000	24.30			
ANISOU	954	NH2	ARG	135	3520	2441	3272	-101	72	5	8	2
ATOM	955	N	GLU	136	19.403	23.533	40.149	1.000	15.76			
ANISOU	955	N	GLU	136	1897	1696	2396	-178	17	3	1	8
ATOM	956	CA	GLU	136	20.752	23.431	40.694	1.000	15.16			
ANISOU	956	CA	GLU	136	1687	1770	2302	-97	279	1	4	0
ATOM	957	C	GLU	136	21.186	22.001	40.978	1.000	16.74			
ANISOU	957	C	GLU	136	1535	1704	3122	-148	-172	-	7	2
ATOM	958	O	GLU	136	22.350	21.637	40.701	1.000	17.42			
ANISOU	958	O	GLU	136	1710	1908	2999	7	30	9	2	
ATOM	959	CB	GLU	136	20.957	24.284	41.962	1.000	16.64			
ANISOU	959	CB	GLU	136	2048	1785	2487	53	11	-	1	6
ATOM	960	CG	GLU	136	20.762	25.772	41.718	1.000	17.80			
ANISOU	960	CG	GLU	136	2036	1714	3014	-286	-169	1	1	0
ATOM	961	CD	GLU	136	21.534	26.269	40.513	1.000	20.92			
ANISOU	961	CD	GLU	136	2174	2273	3503	-343	70	4	6	9
ATOM	962	OE1	GLU	136	22.742	25.987	40.454	1.000	24.97			
ANISOU	962	OE1	GLU	136	2116	2434	4938	-494	531	2	1	9
ATOM	963	OE2	GLU	136	21.022	27.037	39.672	1.000	24.77			
ANISOU	963	OE2	GLU	136	2975	2618	3817	-708	-133	1	0	2	9
ATOM	964	N	VAL	137	20.262	21.172	41.450	1.000	15.34			
ANISOU	964	N	VAL	137	1681	1696	2453	-108	-287	1	1	3
ATOM	965	CA	VAL	137	20.568	19.750	41.647	1.000	15.92			
ANISOU	965	CA	VAL	137	1755	1802	2493	83	-4	2	1	0
ATOM	966	C	VAL	137	20.926	19.086	40.326	1.000	15.86			
ANISOU	966	C	VAL	137	1604	1869	2555	-38	-35	6	6	
ATOM	967	O	VAL	137	21.905	18.308	40.174	1.000	16.70			
ANISOU	967	O	VAL	137	1617	2118	2609	72	-151	-	9	0
ATOM	968	CB	VAL	137	19.358	18.990	42.283	1.000	15.35			
ANISOU	968	CB	VAL	137	1729	1663	2440	8	-29	5		
ATOM	969	CG1	VAL	137	19.607	17.478	42.176	1.000	16.93			
ANISOU	969	CG1	VAL	137	1521	1689	3223	160	-345	9	6	
ATOM	970	CG2	VAL	137	19.144	19.420	43.724	1.000	15.43			
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ATOM	971	N	LEU	138	20.149	19.407	39.284	1.000	15.52			
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ATOM	972	CA	LEU	138	20.378	18.881	37.936	1.000	15.74			
ANISOU	972	CA	LEU	138	1576	1862	2543	-71	15	5	1	
ATOM	973	C	LEU	138	21.721	19.396	37.406	1.000	17.42			
ANISOU	973	C	LEU	138	1588	2119	2912	-87	162	-	4	5
ATOM	974	O	LEU	138	22.503	18.609	36.846	1.000	19.13			
ANISOU	974	O	LEU	138	1878	2406	2985	186	317	6	2	
ATOM	975	CB	LEU	138	19.211	19.248	36.996	1.000	14.70			
ANISOU	975	CB	LEU	138	1592	1642	2349	-50	141	1	9	0
ATOM	976	CG	LEU	138	17.883	18.541	37.375	1.000	14.38			
ANISOU	976	CG	LEU	138	1657	1409	2399	-44	-4	2	8	8

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ANISOU  977  CD1 LEU   138  1743    1848    2539    128   -218  168
ATOM    978  CD2 LEU   138 17.975  17.027  37.156 1.000 17.48
ANISOU  978  CD2 LEU   138  2185    1435    3021   -107   -480  287
ATOM    979  N   ARG   139 21.963  20.708  37.548 1.000 17.44
ANISOU  979  N   ARG   139  1797    2157    2674   -319    238  192
ATOM    980  CA  ARG   139 23.189  21.319  36.996 1.000 19.06
ANISOU  980  CA  ARG   139  2043    2462    2735   -366    482  376
ATOM    981  C   ARG   139 24.419  20.734  37.685 1.000 19.72
ANISOU  981  C   ARG   139  1797    2600    3097   -518    482  376
ATOM    982  O   ARG   139 25.461  20.432  37.094 1.000 20.70
ANISOU  982  O   ARG   139  2046    2469    3350   -288    607  195
ATOM    983  CB  ARG   139 23.152  22.850  37.101 1.000 24.54
ANISOU  983  CB  ARG   139  2525    2403    4396   -402    951  690
ATOM    984  CG  ARG   139 23.886  23.665  36.073 1.000 36.05
ANISOU  984  CG  ARG   139  6517    2967    4212  -2176   1609  140
ATOM    985  CD  ARG   139 23.852  25.148  36.443 1.000 44.95
ANISOU  985  CD  ARG   139  7459    1902    7716   -242  -1324  1930
ATOM    986  NE  ARG   139 22.525  25.727  36.547 1.000 43.27
ANISOU  986  NE  ARG   139  6637    3846    5959   -828  -2173  -698
ATOM    987  CZ  ARG   139 21.821  26.330  35.605 1.000 41.34
ANISOU  987  CZ  ARG   139  5939    4102    5666    497    645  1140
ATOM    988  NH1 ARG   139 22.308  26.436  34.376 1.000 44.01
ANISOU  988  NH1 ARG   139  6564    4146    6011    550   1393  336
ATOM    989  NH2 ARG   139 20.614  26.837  35.833 1.000 45.75
ANISOU  989  NH2 ARG   139  6162    4618    6602    537   1938  2405
ATOM    990  N   ALA   140 24.357  20.566  39.009 1.000 18.77
ANISOU  990  N   ALA   140  1742    2387    3003   -255    145    6    9
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ANISOU  991  CA  ALA   140  1583    2641    3197    -28     38  -668
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ANISOU  992  C   ALA   140  2018    2342    2843    -67     76  -103
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ANISOU  993  O   ALA   140  1900    2436    3778   -2 472   -80
ATOM    994  CB  ALA   140 25.273  20.345  41.275 1.000 19.74
ANISOU  994  CB  ALA   140  1824    2592    3084    35 0    -360
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ANISOU  995  N   THR   141  2014    2209    3498   -115    305   -138
ATOM    996  CA  THR   141 25.151  16.530  38.717 1.000 17.15
ANISOU  996  CA  THR   141  1870    2039    2609    61 51 218
ATOM    997  C   THR   141 25.269  16.278  37.208 1.000 17.44
ANISOU  997  C   THR   141  1492    2443    2693    21 278 199
ATOM    998  O   THR   141 25.343  15.106  36.792 1.000 19.24
ANISOU  998  O   THR   141  1871    2623    2814    63 579   -63
ATOM    999  CB  THR   141 24.048  15.629  39.290 1.000 16.79
ANISOU  999  CB  THR   141  1708    2261    2410    83 164 3 1
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ANISOU 1000  OG1 THR   141  1894    2235    2399   -101   -53  518
ATOM   1001  CG2 THR   141 23.982  15.734  40.807 1.000 17.83
ANISOU 1001  CG2 THR   141  1521    2878    2377    164   -43  2  0
ATOM   1002  N   GLY   142 25.361  17.301  36.381 1.000 19.69
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ATOM   1003  CA  GLY   142 25.517  17.123  34.923 1.000 19.08
ANISOU 1003  CA  GLY   142  1878    2819    2551    128   -163  255
ATOM   1004  C   GLY   142 24.284  16.441  34.313 1.000 18.75
ANISOU 1004  C   GLY   142  1972    2410    2744    0  252 -117
ATOM   1005  O   GLY   142 24.443  15.755  33.315 1.000 22.41
ANISOU 1005  O   GLY   142  2432    2681    3403   -161   571  -680
ATOM   1006  N   THR   143 23.093  16.650  34.854 1.000 17.28
ANISOU 1006  N   THR   143  1895    2002    2667    67 300 244
ATOM   1007  CA  THR   143 21.909  15.932  34.393 1.000 16.88
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ANISOU 1007 CA  THR  143 1953    2006    2456   164   332  6 6
ATOM   1008 C   THR  143 20.998  16.660  33.432 1.000 17.02
ANISOU 1008 C   THR  143 2149    1795    2521   82 196 1 1 7
ATOM   1009 O   THR  143 20.457  17.713  33.764 1.000 20.30
ANISOU 1009 O   THR  143 2795    1815    3103   344   12 -2 8
ATOM   1010 CB  THR  143 21.085  15.490  35.623 1.000 16.40
ANISOU 1010 CB  THR  143 1755    2329    2148   -37   95 -4 4
ATOM   1011 OG1 THR  143 21.922  14.692  36.479 1.000 17.82
ANISOU 1011 OG1 THR  143 2009    2075    2688   -109  39 3 3 7
ATOM   1012 CG2 THR  143 19.887  14.621  35.270 1.000 19.51
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ATOM   1013 N   GLU  144 20.742  16.070  32.248 1.000 18.79
ANISOU 1013 N   GLU  144 2138    2203    2800   47 12 -1 2 1
ATOM   1014 CA  GLU  144 19.729  16.573  31.334 1.000 20.13
ANISOU 1014 CA  GLU  144 2202    2696    2750   -292  -41  3 1 6
ATOM   1015 C   GLU  144 18.637  15.506  31.254 1.000 19.18
ANISOU 1015 C   GLU  144 2255    2614    2418   -292  230  -1 3 1
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ANISOU 1016 O   GLU  144 2268    2442    3446   19 649 - 8 8
ATOM   1017 CB  AGLU 144 20.250  17.061  30.006 0.753 29.50
ANISOU 1017 CB  AGLU 144 3376    4266    3566   -855  206  1 5 0 1
ATOM   1018 CG  AGLU 144 20.195  18.567  29.741 0.753 36.54
ANISOU 1018 CG  AGLU 144 6059    3913    3913   -1728 1769 7 9 5
ATOM   1019 CD  AGLU 144 21.242  19.411  30.426 0.753 33.13
ANISOU 1019 CD  AGLU 144 4189    3432    4966   104   744  8 8 4
ATOM   1020 OE1AGLU 144 21.079  19.690  31.641 0.753 51.91
ANISOU 1020 OE1AGLU 144 3684    11101   4940   -868  -202 - 5 9 0
ATOM   1021 OE2AGLU 144 22.207  19.910  29.807 0.753 50.79
ANISOU 1021 OE2AGLU 144 7949    3695    7653   -3071 3099 - 1 2 4 9
ATOM   1022 CB  BGLU 144 20.372  16.724  29.951 0.247 18.36
ANISOU 1022 CB  BGLU 144 868 3091     3016   334   16 2 6 2
ATOM   1023 CG  BGLU 144 21.214  17.988  29.779 0.247 23.54
ANISOU 1023 CG  BGLU 144 1301    3586    4056   -38   595  5 5 8
ATOM   1024 CD  BGLU 144 21.150  18.468  28.336 0.247 33.24
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ATOM   1026 OE2BGLU 144 21.814  19.464  27.990 0.247 35.35
ANISOU 1026 OE2BGLU 144 3176    5148    5108   35 1752  1 5 1 6
ATOM   1027 N   PRO  145 17.508  15.724  31.911 1.000 17.11
ANISOU 1027 N   PRO  145 2132    1825    2543   68 62 1 5 8
ATOM   1028 CA  PRO  145 16.396  14.781  31.846 1.000 17.41
ANISOU 1028 CA  PRO  145 2290    1942    2384   -73   400  1 2
ATOM   1029 C   PRO  145 15.966  14.545  30.406 1.000 17.94
ANISOU 1029 C   PRO  145 2386    1955    2475   -116  292  -1 0 4
ATOM   1030 O   PRO  145 16.068  15.439  29.557 1.000 18.26
ANISOU 1030 O   PRO  145 2271    2196    2472   -272  170  4 5
ATOM   1031 CB  PRO  145 15.250  15.493  32.594 1.000 17.07
ANISOU 1031 CB  PRO  145 2181    1771    2534   35 133 - 1 4 3
ATOM   1032 CG  PRO  145 15.950  16.504  33.464 1.000 17.11
ANISOU 1032 CG  PRO  145 2341    1841    2319   23 -49 - 2 4
ATOM   1033 CD  PRO  145 17.131  16.977  32.649 1.000 17.54
ANISOU 1033 CD  PRO  145 2178    1601    2884   178   -88  3 0 3
ATOM   1034 N   ASP  146 15.490  13.346  30.104 1.000 18.15
ANISOU 1034 N   ASP  146 2140    1965    2790   -60   321  - 1 5 2
ATOM   1035 CA  ASP  146 14.909  13.121  28.775 1.000 18.43
ANISOU 1035 CA  ASP  146 2487    1664    2853   -329  310  - 1 5 6
ATOM   1036 C   ASP  146 13.809  14.154  28.566 1.000 18.07
ANISOU 1036 C   ASP  146 2824    1979    2064   -31   208  - 3 0 9
ATOM   1037 O   ASP  146 12.959  14.333  29.422 1.000 18.29
ANISOU 1037 O   ASP  146 2491    2173    2287   -168  203  - 2 3 0
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ATOM   1038 CB  ASP  146 14.221  11.735  28.717 1.000 23.50
ANISOU 1038 CB  ASP  146 3489    1671    3769   -653  908  -665
ATOM   1039 CG  ASP  146 13.636  11.508  27.334 1.000 34.15
ANISOU 1039 CG  ASP  146 4070    4205    4700   -1004 361  -2386
ATOM   1040 OD1 ASP  146 12.393  11.521  27.138 1.000 44.73
ANISOU 1040 OD1 ASP  146 3971    9175    3849   -2156 683  378
ATOM   1041 OD2 ASP  146 14.421  11.229  26.397 1.000 44.78
ANISOU 1041 OD2 ASP  146 4342    8626    4046   -813  289  -2326
ATOM   1042 N   GLY  147 13.901  14.854  27.450 1.000 19.28
ANISOU 1042 N   GLY  147 2622    2331    2374   -635  -72  113
ATOM   1043 CA  GLY  147 12.916  15.878  27.171 1.000 18.58
ANISOU 1043 CA  GLY  147 2463    2607    1991   -550  -234 -36
ATOM   1044 C   GLY  147 13.355  17.262  27.590 1.000 18.25
ANISOU 1044 C   GLY  147 2511    2432    1993   -335  -138 6 4
ATOM   1045 O   GLY  147 12.586  18.183  27.289 1.000 20.74
ANISOU 1045 O   GLY  147 2469    2739    2673   -182  -144 205
ATOM   1046 N   GLY  148 14.494  17.357  28.286 1.000 17.38
ANISOU 1046 N   GLY  148 2237    2174    2191   -462  -42  -90
ATOM   1047 CA  GLY  148 15.027  18.658  28.672 1.000 16.72
ANISOU 1047 CA  GLY  148 2308    1789    2255   39 -82 -77
ATOM   1048 C   GLY  148 14.653  19.076  30.085 1.000 13.94
ANISOU 1048 C   GLY  148 1517    1645    2135   77 -201  117
ATOM   1049 O   GLY  148 13.637  18.634  30.694 1.000 16.29
ANISOU 1049 O   GLY  148 1839    1863    2487   -151  -77  285
ATOM   1050 N   VAL  149 15.431  20.003  30.641 1.000 14.93
ANISOU 1050 N   VAL  149 1624    1780    2269   1  -193  -14
ATOM   1051 CA  VAL  149 15.275  20.509  32.017 1.000 14.16
ANISOU 1051 CA  VAL  149 1647    1511    2222  92 -195  86
ATOM   1052 C   VAL  149 13.958  21.218  32.235 1.000 14.37
ANISOU 1052 C   VAL  149 1735    1044    2682   -39   83 188
ATOM   1053 O   VAL  149 13.203  20.970  33.163 1.000 14.63
ANISOU 1053 O   VAL  149 1653    1517    2390  -160  -40  107
ATOM   1054 CB  VAL  149 16.439  21.410  32.417 1.000 14.02
ANISOU 1054 CB  VAL  149 1745    1530    2052   -112  -57  270
ATOM   1055 CG1 VAL  149 16.228  22.101  33.752 1.000 16.48
ANISOU 1055 CG1 VAL  149 2360    1709    2193   -153  -305 8 7
ATOM   1056 CG2 VAL  149 17.733  20.614  32.482 1.000 17.85
ANISOU 1056 CG2 VAL  149 1618    1937    3226   -59   -52  441
ATOM   1057 N   GLU  150 13.634  22.199  31.371 1.000 15.26
ANISOU 1057 N   GLU  150 1759    1328    2711   186   36 267
ATOM   1058 CA  GLU  150 12.471  23.028  31.687 1.000 14.91
ANISOU 1058 CA  GLU  150 1591    1434    2640   93 13 415
ATOM   1059 C   GLU  150 11.182  22.237  31.553 1.000 16.66
ANISOU 1059 C   GLU  150 1680    1980    2670   -197  113  199
ATOM   1060 O   GLU  150 10.259  22.408  32.379 1.000 15.89
ANISOU 1060 O   GLU  150 1697    1761    2578   29 79 580
ATOM   1061 CB  GLU  150 12.531  24.305  30.874 1.000 17.07
ANISOU 1061 CB  GLU  150 1925    1337    3223   254   189  513
ATOM   1062 CG  GLU  150 13.761  25.167  31.220 1.000 19.00
ANISOU 1062 CG  GLU  150 2483    1212    3523   -65   -95  465
ATOM   1063 CD  GLU  150 13.810  25.624  32.658 1.000 20.32
ANISOU 1063 CD  GLU  150 2444    1746    3532   -130  -24  454
ATOM   1064 OE1 GLU  150 12.781  25.749  33.377 1.000 20.88
ANISOU 1064 OE1 GLU  150 2558    1728    3648   29 58 396
ATOM   1065 OE2 GLU  150 14.913  25.946  33.161 1.000 21.77
ANISOU 1065 OE2 GLU  150 2549    2030    3693   -165  -202 273
ATOM   1066 N   ALA  151 11.050  21.288  30.603 1.000 14.98
ANISOU 1066 N   ALA  151 1649    1710    2334   37 -307  551
ATOM   1067 CA  ALA  151 9.834  20.475  30.543 1.000 15.79
ANISOU 1067 CA  ALA  151 1820    2045    2136   -173  -198 408
ATOM   1068 C   ALA  151 9.748  19.531  31.724 1.000 15.38
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ANISOU 1068  C   ALA 151 1674  1953  2216   165   181  4 4 2
ATOM   1069  O   ALA 151 8.642 19.186 32.184 1.000 16.51
ANISOU 1069  O   ALA 151 1778  1852  2643  -152   110  3 3 0
ATOM   1070  CB  ALA 151 9.823 19.663 29.236 1.000 18.05
ANISOU 1070  CB  ALA 151 1910  2811  2139  -275  -316 1 6 6
ATOM   1071  N   PHE 152 10.893 19.135 32.306 1.000 14.25
ANISOU 1071  N   PHE 152 1858  1132  2423   10 -107  2 6 3
ATOM   1072  CA  PHE 152 10.893 18.285 33.493 1.000 13.42
ANISOU 1072  CA  PHE 152 1457  1291  2353  -102  -34  3 0 4
ATOM   1073  C   PHE 152 10.406 19.056 34.695 1.000 13.93
ANISOU 1073  C   PHE 152 1481  1400  2412  -43  -165 1 9 6
ATOM   1074  O   PHE 152 9.679 18.495 35.558 1.000 14.50
ANISOU 1074  O   PHE 152 1590  1482  2438  -85   25 2 6
ATOM   1075  CB  PHE 152 12.309 17.744 33.728 1.000 13.95
ANISOU 1075  CB  PHE 152 1504  1547  2248  -29   111  4 6 3
ATOM   1076  CG  PHE 152 12.475 16.966 35.011 1.000 14.04
ANISOU 1076  CG  PHE 152 1747  1386  2200   88 -58 2 4 7
ATOM   1077  CD1 PHE 152 12.032 15.653 35.076 1.000 13.90
ANISOU 1077  CD1 PHE 152 1906  1306  2069   165   -36  2 8 1
ATOM   1078  CD2 PHE 152 13.094 17.499 36.127 1.000 15.67
ANISOU 1078  CD2 PHE 152 1927  1770  2259  -155  -115 2 3 3
ATOM   1079  CE1 PHE 152 12.213 14.949 36.263 1.000 14.06
ANISOU 1079  CE1 PHE 152 1669  1507  2165   182   -282 3 4 7
ATOM   1080  CE2 PHE 152 13.323 16.799 37.276 1.000 14.83
ANISOU 1080  CE2 PHE 152 1724  1671  2240   35 -112  1 6 5
ATOM   1081  CZ  PHE 152 12.861 15.522 37.361 1.000 14.86
ANISOU 1081  CZ  PHE 152 1994  1734  1916  -162   99 1 1 3
ATOM   1082  N   LEU 153 10.789 20.324 34.789 1.000 15.25
ANISOU 1082  N   LEU 153 1742  1355  2696   58 110 1 5 4
ATOM   1083  CA  LEU 153 10.454 21.151 35.939 1.000 14.65
ANISOU 1083  CA  LEU 153 1783  1429  2354   -66   16 2 0 3
ATOM   1084  C   LEU 153 9.082 21.791 35.877 1.000 14.47
ANISOU 1084  C   LEU 153 1732  1402  2362   -80   76 1 1
ATOM   1085  O   LEU 153 8.581 22.216 36.953 1.000 15.82
ANISOU 1085  O   LEU 153 1940  1454  2616  -313   312  - 1 5 7
ATOM   1086  CB  LEU 153 11.537 22.224 36.165 1.000 16.53
ANISOU 1086  CB  LEU 153 1626  1451  3205   -23   269  - 8 3
ATOM   1087  CG  LEU 153 12.914 21.685 36.514 1.000 15.90
ANISOU 1087  CG  LEU 153 1893  2013  2135   -33  -186 - 3 6
ATOM   1088  CD1 LEU 153 13.922 22.829 36.614 1.000 18.41
ANISOU 1088  CD1 LEU 153 1732  2473  2791  -156   80 - 8 7 6
ATOM   1089  CD2 LEU 153 12.863 20.883 37.794 1.000 21.76
ANISOU 1089  CD2 LEU 153 3083  3182  2005   365   261  1 9 3
ATOM   1090  N   ASP 154 8.473 21.866 34.708 1.000 14.41
ANISOU 1090  N   ASP 154 1768  1181  2525   -25   -8 2 9 3
ATOM   1091  CA  ASP 154 7.092 22.373 34.553 1.000 15.90
ANISOU 1091  CA  ASP 154 1665  1615  2760  -195   27 7 6 9
ATOM   1092  C   ASP 154 6.216 21.161 34.814 1.000 14.66
ANISOU 1092  C   ASP 154 1859  1304  2409   -92   143  5 1 5
ATOM   1093  O   ASP 154 5.995 20.368 33.889 1.000 17.30
ANISOU 1093  O   ASP 154 2561  1455  2557   -29   314  2 3 4
ATOM   1094  CB  ASP 154 6.923 22.909 33.125 1.000 18.59
ANISOU 1094  CB  ASP 154 1905  2077  3081   124   269  1 3 1 7
ATOM   1095  CG  ASP 154 5.461 23.157 32.768 1.000 19.87
ANISOU 1095  CG  ASP 154 2029  2531  2990   226   129  1 4 3 6
ATOM   1096  OD1 ASP 154 4.561 23.253 33.639 1.000 19.68
ANISOU 1096  OD1 ASP 154 1949  2209  3318   92 221 4 9 6
ATOM   1097  OD2 ASP 154 5.207 23.189 31.554 1.000 23.73
ANISOU 1097  OD2 ASP 154 2512  3475  3029   246   -137 6 5 3
ATOM   1098  N   CYS 155 5.831 20.904 36.070 1.000 14.25
ANISOU 1098  N   CYS 155 1708  1365  2342   -101   -62  5 4 6
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ATOM   1099 CA  CYS  155 5.418   19.569  36.468 1.000 13.45
ANISOU 1099 CA  CYS  155 1608    1346    2158   -191  4  458
ATOM   1100 C   CYS  155 4.157   19.574  37.302 1.000 12.49
ANISOU 1100 C   CYS  155 1644    1331    1772   -200  -148 6 2
ATOM   1101 O   CYS  155 3.224   20.303  36.941 1.000 14.55
ANISOU 1101 O   CYS  155 1633    1492    2402   -122  -111 4 4 2
ATOM   1102 CB  CYS  155 6.664   18.872  37.098 1.000 14.37
ANISOU 1102 CB  CYS  155 1907    1366    2186   122   -137 2 1 1
ATOM   1103 SG  CYS  155 7.265   19.595  38.641 1.000 14.99
ANISOU 1103 SG  CYS  155 1561    1821    2315   -74   -98  1 8 2
ATOM   1104 N   GLU  156 4.060   18.706  38.316 1.000 12.89
ANISOU 1104 N   GLU  156 1575    1379    1945   -130  29 1 9 4
ATOM   1105 CA  GLU  156 2.788   18.447  39.029 1.000 12.98
ANISOU 1105 CA  GLU  156 1508    1311    2114   -210  21 1 4 0
ATOM   1106 C   GLU  156 2.987   18.676  40.510 1.000 12.34
ANISOU 1106 C   GLU  156 1414    1198    2078   102   24 2 0 4
ATOM   1107 O   GLU  156 2.828   17.757  41.289 1.000 14.89
ANISOU 1107 O   GLU  156 1875    1425    2359   -15   -54  4 4 2
ATOM   1108 CB  GLU  156 2.278   17.047  38.678 1.000 14.48
ANISOU 1108 CB  GLU  156 1968    1323    2213   -279  120  8 7
ATOM   1109 CG  GLU  156 1.855   17.038  37.227 1.000 14.86
ANISOU 1109 CG  GLU  156 1894    1526    2227   -120  95 -1 5 2
ATOM   1110 CD  GLU  156 0.523   17.687  36.932 1.000 17.10
ANISOU 1110 CD  GLU  156 2091    1976    2431   44 -4 1 4 4
ATOM   1111 OE1 GLU  156 -0.204  17.967  37.886 1.000 17.98
ANISOU 1111 OE1 GLU  156 1811    2155    2866   -35   10 -3 5 5
ATOM   1112 OE2 GLU  156 0.214   17.990  35.759 1.000 20.99
ANISOU 1112 OE2 GLU  156 2854    2419    2704   -386  -516 5 6 2
ATOM   1113 N   PRO  157 3.292   19.893  40.958 1.000 12.09
ANISOU 1113 N   PRO  157 1314    1347    1934   12 -48 2 4 9
ATOM   1114 CA  PRO  157 3.576   20.121  42.391 1.000 13.28
ANISOU 1114 CA  PRO  157 1425    1696    1924   -68   117  1 4 7
ATOM   1115 C   PRO  157 2.330   19.996  43.248 1.000 12.87
ANISOU 1115 C   PRO  157 1236    1737    1916   -214  -47  1 2 4
ATOM   1116 O   PRO  157 1.192   20.190  42.744 1.000 13.73
ANISOU 1116 O   PRO  157 1286    1717    2214   -190  -17  1 4 3
ATOM   1117 CB  PRO  157 4.061   21.580  42.407 1.000 13.94
ANISOU 1117 CB  PRO  157 1518    1729    2047   -289  -166 2 4 7
ATOM   1118 CG  PRO  157 3.363   22.184  41.226 1.000 13.06
ANISOU 1118 CG  PRO  157 1558    1518    1887   -32   -158 - 8 8
ATOM   1119 CD  PRO  157 3.494   21.128  40.167 1.000 12.03
ANISOU 1119 CD  PRO  157 1521    1081    1968   -2 -7 1 2 1
ATOM   1120 N   LEU  158 2.542   19.738  44.526 1.000 13.02
ANISOU 1120 N   LEU  158 1554    1493    1899   -124  148  7 3
ATOM   1121 CA  LEU  158 1.438   19.699  45.496 1.000 12.72
ANISOU 1121 CA  LEU  158 1465    1552    1815   -126  -14  3 6
ATOM   1122 C   LEU  158 1.927   20.389  46.772 1.000 12.90
ANISOU 1122 C   LEU  158 1230    1715    1957   -27   -29  - 8 0
ATOM   1123 O   LEU  158 2.975   19.977  47.289 1.000 14.06
ANISOU 1123 O   LEU  158 1374    1666    2304   59 -257  -236
ATOM   1124 CB  LEU  158 1.046   18.244  45.815 1.000 13.58
ANISOU 1124 CB  LEU  158 1673    1590    1896   -213  57 1 7 1
ATOM   1125 CG  LEU  158 0.044   18.030  46.945 1.000 14.84
ANISOU 1125 CG  LEU  158 1471    1774    2396   -16   262  2 4 2
ATOM   1126 CD1 LEU  158 -1.333  18.635  46.671 1.000 16.96
ANISOU 1126 CD1 LEU  158 1485    2196    2764   5  -148  - 4 0 1
ATOM   1127 CD2 LEU  158 -0.142  16.539  47.161 1.000 14.98
ANISOU 1127 CD2 LEU  158 1976    1820    1897   -390  171  7 9
ATOM   1128 N   LEU  159 1.139   21.306  47.283 1.000 13.44
ANISOU 1128 N   LEU  159 1509    1434    2165   43 -87 - 1 1 9
ATOM   1129 CA  LEU  159 1.443   21.963  48.571 1.000 13.39
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ANISOU 1129  CA  LEU  159 1438    1555    2095   -36   -80   -91
ATOM   1130  C   LEU  159 0.419   21.494  49.602 1.000 14.49
ANISOU 1130  C   LEU  159 1336    2034    2135   -152  -208  -38
ATOM   1131  O   LEU  159 -0.790  21.596  49.419 1.000 15.09
ANISOU 1131  O   LEU  159 1414    1999    2319   90   -131  90
ATOM   1132  CB  LEU  159 1.390   23.466  48.394 1.000 15.28
ANISOU 1132  CB  LEU  159 1720    1447    2639   55   -325  -197
ATOM   1133  CG  LEU  159 1.484   24.320  49.669 1.000 17.11
ANISOU 1133  CG  LEU  159 2146    1689    2665   363   -332  -343
ATOM   1134  CD1 LEU  159 2.775   24.114  50.453 1.000 18.70
ANISOU 1134  CD1 LEU  159 2276    1759    3070   379   -687  -540
ATOM   1135  CD2 LEU  159 1.312   25.801  49.291 1.000 21.00
ANISOU 1135  CD2 LEU  159 2918    1535    3526   439   -692  -382
ATOM   1136  N   ARG  160 0.916   21.107  50.774 1.000 14.37
ANISOU 1136  N   ARG  160 1688    1709    2063   -101  -186  47
ATOM   1137  CA  ARG  160 0.055   20.747  51.901 1.000 15.61
ANISOU 1137  CA  ARG  160 1726    1990    2217   -64   90   -118
ATOM   1138  C   ARG  160 0.480   21.501  53.155 1.000 15.40
ANISOU 1138  C   ARG  160 1557    2158    2135   -34   -46   -38
ATOM   1139  O   ARG  160 1.639   21.401  53.576 1.000 16.32
ANISOU 1139  O   ARG  160 1528    2508    2164   63   41   -104
ATOM   1140  CB  ARG  160 0.048   19.263  52.227 1.000 16.13
ANISOU 1140  CB  ARG  160 2134    2084    1912   -127  -30   129
ATOM   1141  CG  ARG  160 -0.594  18.410  51.155 1.000 17.17
ANISOU 1141  CG  ARG  160 1963    1934    2628   -140  -212  -60
ATOM   1142  CD  ARG  160 -0.672  16.959  51.627 1.000 18.16
ANISOU 1142  CD  ARG  160 2767    1965    2166   125   -330  -35
ATOM   1143  NE  ARG  160 -1.382  16.102  50.682 1.000 18.11
ANISOU 1143  NE  ARG  160 2408    1775    2699   -56   -308  20
ATOM   1144  CZ  ARG  160 -1.221  14.789  50.581 1.000 16.76
ANISOU 1144  CZ  ARG  160 2191    1748    2428   -97   55   174
ATOM   1145  NH1 ARG  160 -0.326  14.192  51.374 1.000 20.55
ANISOU 1145  NH1 ARG  160 2306    2012    3491   -26   -457  305
ATOM   1146  NH2 ARG  160 -1.908  14.095  49.689 1.000 19.23
ANISOU 1146  NH2 ARG  160 2502    2031    2774   181   -147  -338
ATOM   1147  N   PHE  161 -0.469  22.257  53.755 1.000 15.36
ANISOU 1147  N   PHE  161 1604    2120    2111   -37   -63   -128
ATOM   1148  CA  PHE  161 -0.209  22.975  54.999 1.000 16.25
ANISOU 1148  CA  PHE  161 2173    1774    2227   -71   -187  -89
ATOM   1149  C   PHE  161 -1.030  22.236  56.069 1.000 16.98
ANISOU 1149  C   PHE  161 1980    2432    2041   -217  -161  -162
ATOM   1150  O   PHE  161 -2.248  22.113  55.948 1.000 20.38
ANISOU 1150  O   PHE  161 1981    3291    2473   -190  -191  -72
ATOM   1151  CB  PHE  161 -0.683  24.431  54.862 1.000 19.76
ANISOU 1151  CB  PHE  161 2065    1903    3540   167   355   -198
ATOM   1152  CG  PHE  161 -0.379  25.259  56.109 1.000 23.61
ANISOU 1152  CG  PHE  161 3026    1905    4041   836   -59   -591
ATOM   1153  CD1 PHE  161 -1.194  25.304  57.228 1.000 28.25
ANISOU 1153  CD1 PHE  161 3992    2474    4268   1077  369   -1253
ATOM   1154  CD2 PHE  161 0.807   25.978  56.141 1.000 26.62
ANISOU 1154  CD2 PHE  161 4015    2483    3616   -130  -927  -106
ATOM   1155  CE1 PHE  161 -0.850  25.992  58.383 1.000 35.29
ANISOU 1155  CE1 PHE  161 6873    2097    4437   1538  -135  -1399
ATOM   1156  CE2 PHE  161 1.153   26.723  57.258 1.000 33.63
ANISOU 1156  CE2 PHE  161 4643    3240    4894   1263  -2085  -1268
ATOM   1157  CZ  PHE  161 0.320   26.726  58.363 1.000 36.44
ANISOU 1157  CZ  PHE  161 6071    4282    3493   1455  -2477  -1044
ATOM   1158  N   ARG  162 -0.358  21.767  57.130 1.000 17.59
ANISOU 1158  N   ARG  162 2095    2487    2103   -118  -135  -69
ATOM   1159  CA  ARG  162 -1.072  21.078  58.199 1.000 18.27
ANISOU 1159  CA  ARG  162 2769    2414    1758   6   178  -378
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ATOM   1160 C   ARG  162 -0.880  21.758  59.553 1.000 20.16
ANISOU 1160 C   ARG  162 2110    3341    2210   -36   41  -960
ATOM   1161 O   ARG  162 0.217   22.160  59.893 1.000 19.61
ANISOU 1161 O   ARG  162 2257    2993    2201   -194  -73  -359
ATOM   1162 CB  ARG  162 -0.580  19.640  58.356 1.000 20.81
ANISOU 1162 CB  ARG  162 2958    2275    2675   -129  6   -169
ATOM   1163 CG  ARG  162 -0.843  18.724  57.166 1.000 19.90
ANISOU 1163 CG  ARG  162 3044    2073    2443   -112  254  -38
ATOM   1164 CD  ARG  162 -0.182  17.383  57.393 1.000 28.02
ANISOU 1164 CD  ARG  162 5599    2038    3010   381   -14  114
ATOM   1165 NE  ARG  162 -0.369  16.420  56.326 1.000 27.74
ANISOU 1165 NE  ARG  162 4151    2294    4097   555   -687 -434
ATOM   1166 CZ  ARG  162 -1.278  15.445  56.370 1.000 31.11
ANISOU 1166 CZ  ARG  162 2560    3729    5531   470   -350 -1152
ATOM   1167 NH1 ARG  162 -2.092  15.324  57.403 1.000 42.97
ANISOU 1167 NH1 ARG  162 3475    5906    6946   -579  1019 -2492
ATOM   1168 NH2 ARG  162 -1.329  14.603  55.353 1.000 29.64
ANISOU 1168 NH2 ARG  162 3066    2738    5458   120   -143 -708
ATOM   1169 N   TYR  163 -1.956  21.780  60.311 1.000 19.52
ANISOU 1169 N   TYR  163 2394    2901    2120   147   263  -763
ATOM   1170 CA  TYR  163 -1.943  22.102  61.732 1.000 22.74
ANISOU 1170 CA  TYR  163 3312    3107    2219   369   302  -878
ATOM   1171 C   TYR  163 -2.037  20.800  62.536 1.000 24.20
ANISOU 1171 C   TYR  163 2802    3901    2492   -222  253  -189
ATOM   1172 O   TYR  163 -2.992  20.049  62.274 1.000 28.02
ANISOU 1172 O   TYR  163 2305    4409    3934   -202  -126 399
ATOM   1173 CB  TYR  163 -3.198  22.912  62.114 1.000 28.98
ANISOU 1173 CB  TYR  163 3861    3231    3920   267   1196 -1783
ATOM   1174 CG  TYR  163 -3.342  22.997  63.623 1.000 25.58
ANISOU 1174 CG  TYR  163 2572    3382    3767   543   749  -1204
ATOM   1175 CD1 TYR  163 -2.458  23.826  64.319 1.000 37.32
ANISOU 1175 CD1 TYR  163 3654    6112    4413   -759  884  -2373
ATOM   1176 CD2 TYR  163 -4.315  22.333  64.345 1.000 29.13
ANISOU 1176 CD2 TYR  163 2622    3994    4452   749   1084 -769
ATOM   1177 CE1 TYR  163 -2.546  23.966  65.702 1.000 38.28
ANISOU 1177 CE1 TYR  163 2905    7138    4503   -454  987  -2740
ATOM   1178 CE2 TYR  163 -4.396  22.431  65.726 1.000 37.36
ANISOU 1178 CE2 TYR  163 3220    6336    4640   -273  1997 -1618
ATOM   1179 CZ  TYR  163 -3.500  23.250  66.393 1.000 49.85
ANISOU 1179 CZ  TYR  163 5272    8795    4872   -1810 1593 -2223
ATOM   1180 OH  TYR  163 -3.595  23.365  67.768 1.000 44.81
ANISOU 1180 OH  TYR  163 5246    7368    4413   -222  270  -496
ATOM   1181 N   PHE  164 -1.098  20.651  63.448 1.000 24.84
ANISOU 1181 N   PHE  164 2905    3368    3164   -89   -125 -361
ATOM   1182 CA  PHE  164 -1.045  19.532  64.370 1.000 28.14
ANISOU 1182 CA  PHE  164 3538    3957    3195   223   -163 -30
ATOM   1183 C   PHE  164 -1.360  20.003  65.787 1.000 26.67
ANISOU 1183 C   PHE  164 2964    3937    3234   -473  -194 -257
ATOM   1184 O   PHE  164 -0.540  20.730  66.342 1.000 31.26
ANISOU 1184 O   PHE  164 3119    4888    3869   -959  -260 -519
ATOM   1185 CB  PHE  164 0.347   18.881  64.396 1.000 27.86
ANISOU 1185 CB  PHE  164 3423    3725    3436   76  -199  -32
ATOM   1186 CG  PHE  164 0.744   18.301  63.052 1.000 26.77
ANISOU 1186 CG  PHE  164 2914    3474    3785   -598  74  -275
ATOM   1187 CD1 PHE  164 1.435   19.093  62.143 1.000 26.16
ANISOU 1187 CD1 PHE  164 2827    3836    3278   135   -615 711
ATOM   1188 CD2 PHE  164 0.414   16.996  62.717 1.000 31.24
ANISOU 1188 CD2 PHE  164 4365    2808    4698   349   -298 -96
ATOM   1189 CE1 PHE  164 1.787   18.609  60.894 1.000 30.09
ANISOU 1189 CE1 PHE  164 3609    5052    2771   -148  -1030 641
ATOM   1190 CE2 PHE  164 0.786   16.501  61.475 1.000 38.25
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ANISOU 1190 CE2 PHE  164 6659    4077    3797   -740  -1363  -612
ATOM   1191 CZ  PHE  164 1.494   17.298  60.588 1.000 32.74
ANISOU 1191 CZ  PHE  164 3189    5078    4172   712   -944  -385
ATOM   1192 N   PRO  165 -2.469  19.609  66.379 1.000 30.62
ANISOU 1192 N   PRO  165 3876    4009    3751   -1371 344   -508
ATOM   1193 CA  PRO  165 -2.670  19.813  67.809 1.000 33.09
ANISOU 1193 CA  PRO  165 3299    5764    3510   -190   80  236
ATOM   1194 C   PRO  165 -1.459  19.408  68.638 1.000 36.32
ANISOU 1194 C   PRO  165 3538    5745    4518   664   -191  -234
ATOM   1195 O   PRO  165 -0.776  18.428  68.371 1.000 32.94
ANISOU 1195 O   PRO  165 4268    4761    3487   220   501   387
ATOM   1196 CB  PRO  165 -3.882  18.929  68.123 1.000 38.44
ANISOU 1196 CB  PRO  165 3807    6924    3873   -765  271   827
ATOM   1197 CG  PRO  165 -4.635  18.842  66.845 1.000 35.82
ANISOU 1197 CG  PRO  165 2595    7020    3995   5   688  -828
ATOM   1198 CD  PRO  165 -3.690  19.130  65.710 1.000 33.90
ANISOU 1198 CD  PRO  165 3192    5919    3770   -1149 194   169
ATOM   1199 N   LEU  178 7.727   7.453   68.180 1.000 64.52
ANISOU 1199 N   LEU  178 12297   5376    6843   278   -218  3721
ATOM   1200 CA  LEU  178 7.629   8.260   66.973 1.000 43.31
ANISOU 1200 CA  LEU  178 10557   2730    3168   -984  -2821  -135
ATOM   1201 C   LEU  178 6.159   8.539   66.662 1.000 47.36
ANISOU 1201 C   LEU  178 9239    3530    5225   -2598 -1186  1204
ATOM   1202 O   LEU  178 5.314   7.659   66.796 1.000 56.53
ANISOU 1202 O   LEU  178 11777   5626    4076   -4835 1265  -602
ATOM   1203 CB  LEU  178 8.222   7.582   65.746 1.000 55.55
ANISOU 1203 CB  LEU  178 11470   3734    5902   -1314 -1197  -1822
ATOM   1204 CG  LEU  178 9.662   7.092   65.774 1.000 62.34
ANISOU 1204 CG  LEU  178 10812   5116    7760   -1971 194   -443
ATOM   1205 CD1 LEU  178 9.916   6.185   64.579 1.000 54.23
ANISOU 1205 CD1 LEU  178 9626    4989    5988   1878  -3799  511
ATOM   1206 CD2 LEU  178 10.633  8.264   65.773 1.000 66.44
ANISOU 1206 CD2 LEU  178 11265   3454    10526  -1170 4090  -516
ATOM   1207 N   ARG  179 5.879   9.751   66.192 1.000 52.90
ANISOU 1207 N   ARG  179 7853    3826    8421   102   1230  1031
ATOM   1208 CA  ARG  179 4.495   10.033  65.807 1.000 51.26
ANISOU 1208 CA  ARG  179 7235    4820    7421   -229  1890  -383
ATOM   1209 C   ARG  179 4.242   9.563   64.383 1.000 55.25
ANISOU 1209 C   ARG  179 7178    6083    7731   -946  2260  -1134
ATOM   1210 O   ARG  179 3.120   9.211   64.021 1.000 58.51
ANISOU 1210 O   ARG  179 7036    7628    7565   -1820 3675  -2851
ATOM   1211 CB  ARG  179 4.180   11.512  66.040 1.000 41.49
ANISOU 1211 CB  ARG  179 6600    4448    4716   -155  1916  1137
ATOM   1212 CG  ARG  179 3.293   11.700  67.277 1.000 43.15
ANISOU 1212 CG  ARG  179 6120    5908    4367   90  1338   530
ATOM   1213 CD  ARG  179 1.888   12.059  66.833 1.000 47.63
ANISOU 1213 CD  ARG  179 6180    7453    4463   195   860   -531
ATOM   1214 NE  ARG  179 1.459   13.367  67.269 1.000 52.00
ANISOU 1214 NE  ARG  179 7384    7834    4539   1669  -1168  -538
ATOM   1215 CZ  ARG  179 1.322   14.470  66.556 1.000 64.81
ANISOU 1215 CZ  ARG  179 10838   8000    5788   1457  -1107  63
ATOM   1216 NH1 ARG  179 1.637   14.518  65.268 1.000 59.74
ANISOU 1216 NH1 ARG  179 9535    8090    5074   3628  -2691  445
ATOM   1217 NH2 ARG  179 0.907   15.606  67.117 1.000 65.83
ANISOU 1217 NH2 ARG  179 10451   9083    5478   4171  -776  1200
ATOM   1218 N   MET  180 5.304   9.501   63.589 1.000 43.96
ANISOU 1218 N   MET  180 5383    3769    7550   705   852   -1245
ATOM   1219 CA  MET  180 5.264   9.035   62.210 1.000 40.44
ANISOU 1219 CA  MET  180 2356    5467    7543   -398  574   -1482
ATOM   1220 C   MET  180 6.552   8.258   61.920 1.000 43.91
ANISOU 1220 C   MET  180 2731    6220    7733   18  320  -2324
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ATOM   1221 O   MET  180 7.629   8.679   62.327 1.000 39.46
ANISOU 1221 O   MET  180 2377    5064    7554   -395  906  -912
ATOM   1222 CB  MET  180 5.129   10.189  61.219 1.000 49.84
ANISOU 1222 CB  MET  180 2749    7966    8223   -452  -1114 7 2
ATOM   1223 CG  MET  180 5.339   9.818   59.757 1.000 62.58
ANISOU 1223 CG  MET  180 7280    8911    7587   -2331 -3353 -505
ATOM   1224 SD  MET  180 4.622   11.015  58.608 1.000 74.24
ANISOU 1224 SD  MET  180 7480    13510   7216   4918  -262 -905
ATOM   1225 CE  MET  180 4.501   10.037  57.110 1.000 79.59
ANISOU 1225 CE  MET  180 6119    20000   4120   -1978 1874 -912
ATOM   1226 N   ALA  181 6.376   7.112   61.275 1.000 37.44
ANISOU 1226 N   ALA  181 3523    5646    5055   -271  882  -1132
ATOM   1227 CA  ALA  181 7.407   6.140   60.986 1.000 37.40
ANISOU 1227 CA  ALA  181 3980    3980    6250   -625  2048 461
ATOM   1228 C   ALA  181 8.287   6.591   59.837 1.000 31.49
ANISOU 1228 C   ALA  181 2975    3842    5149   -32   920  956
ATOM   1229 O   ALA  181 7.834   7.393   58.997 1.000 30.77
ANISOU 1229 O   ALA  181 2903    4021    4765   197   -93  164
ATOM   1230 CB  ALA  181 6.727   4.817   60.620 1.000 42.66
ANISOU 1230 CB  ALA  181 4105    4284    7820   -1023 1629 557
ATOM   1231 N   PRO  182 9.541   6.137   59.840 1.000 24.52
ANISOU 1231 N   PRO  182 2782    4237    2296   -240  -76  320
ATOM   1232 CA  PRO  182 10.442  6.667   58.820 1.000 20.55
ANISOU 1232 CA  PRO  182 2612    2870    2326   -335  -117 -65
ATOM   1233 C   PRO  182 9.958   6.402   57.408 1.000 19.31
ANISOU 1233 C   PRO  182 2609    2491    2236   -391  48  -86
ATOM   1234 O   PRO  182 9.448   5.326   57.080 1.000 21.68
ANISOU 1234 O   PRO  182 2991    2486    2759   -440  -340 -55
ATOM   1235 CB  PRO  182 11.768  5.939   59.047 1.000 24.98
ANISOU 1235 CB  PRO  182 2589    3860    3042   -170  -286 153
ATOM   1236 CG  PRO  182 11.681  5.351   60.393 1.000 28.42
ANISOU 1236 CG  PRO  182 3352    3582    3863   656   321  1038
ATOM   1237 CD  PRO  182 10.215  5.210   60.747 1.000 32.21
ANISOU 1237 CD  PRO  182 3333    4905    4000   -826  -390 1785
ATOM   1238 N   HIS  183 10.111  7.414   56.561 1.000 19.27
ANISOU 1238 N   HIS  183 2131    2658    2533   -274  -204 176
ATOM   1239 CA  HIS  183 9.757   7.306   55.144 1.000 18.01
ANISOU 1239 CA  HIS  183 1882    2311    2652   -341  -455 346
ATOM   1240 C   HIS  183 10.749  8.124   54.337 1.000 15.74
ANISOU 1240 C   HIS  183 1964    1560    2456   -75  -352 128
ATOM   1241 O   HIS  183 11.355  9.061   54.868 1.000 18.14
ANISOU 1241 O   HIS  183 2297    2093    2504   -509  -127 -135
ATOM   1242 CB  HIS  183 8.338   7.781   54.835 1.000 18.66
ANISOU 1242 CB  HIS  183 1970    2173    2945   -136  -243 371
ATOM   1243 CG  HIS  183 8.089   9.120   55.447 1.000 26.67
ANISOU 1243 CG  HIS  183 3100    2751    4281   262   222  -306
ATOM   1244 ND1 HIS  183 7.884   9.362   56.800 1.000 35.36
ANISOU 1244 ND1 HIS  183 4432    4078    4926   -1190 1466 -1454
ATOM   1245 CD2 HIS  183 8.051   10.311  54.821 1.000 33.00
ANISOU 1245 CD2 HIS  183 4117    2522    5898   1687  -677 -173
ATOM   1246 CE1 HIS  183 7.739   10.658  56.980 1.000 35.91
ANISOU 1246 CE1 HIS  183 2611    4468    6565   -472  -625 -2616
ATOM   1247 NE2 HIS  183 7.829   11.251  55.798 1.000 40.55
ANISOU 1247 NE2 HIS  183 4375    3417    7614   1821  -1013 -1590
ATOM   1248 N   TYR  184 10.890  7.778   53.061 1.000 15.68
ANISOU 1248 N   TYR  184 1973    1551    2434   -124  -470 107
ATOM   1249 CA  TYR  184 11.605  8.685   52.152 1.000 14.81
ANISOU 1249 CA  TYR  184 1798    1392    2438   147   -312 145
ATOM   1250 C   TYR  184 10.572  9.239   51.169 1.000 14.53
ANISOU 1250 C   TYR  184 1656    1449    2416   -70   -399 9 8
ATOM   1251 O   TYR  184 9.468   8.728   51.045 1.000 15.83
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ANISOU 1251 O   TYR 184 1717    1383    2916   -103  -448 1 5 0
ATOM   1252 CB  TYR 184 12.699  8.004   51.360 1.000 15.66
ANISOU 1252 CB  TYR 184 1686    1323    2943   69 -366  -168
ATOM   1253 CG  TYR 184 12.383  6.785   50.562 1.000 14.85
ANISOU 1253 CG  TYR 184 1743    1313    2586   109   -567 4 3
ATOM   1254 CD1 TYR 184 12.200  5.540   51.185 1.000 15.49
ANISOU 1254 CD1 TYR 184 1549    1315    3021   -29   -575 1 9 0
ATOM   1255 CD2 TYR 184 12.329  6.836   49.165 1.000 15.89
ANISOU 1255 CD2 TYR 184 1724    1763    2552   55 -27 - 6 4
ATOM   1256 CE1 TYR 184 11.962  4.396   50.442 1.000 15.61
ANISOU 1256 CE1 TYR 184 1695    1244    2992   229   -137 1 1 3
ATOM   1257 CE2 TYR 184 12.130  5.661   48.447 1.000 17.52
ANISOU 1257 CE2 TYR 184 2340    1776    2540   4  83 - 9 0
ATOM   1258 CZ  TYR 184 11.915  4.449   49.083 1.000 16.96
ANISOU 1258 CZ  TYR 184 1695    1736    3014   -156  -480 3 4
ATOM   1259 OH  TYR 184 11.682  3.325   48.310 1.000 18.81
ANISOU 1259 OH  TYR 184 2020    1775    3352   260   -277 - 3 1 2
ATOM   1260 N   ASP 185 10.924  10.330  50.502 1.000 14.36
ANISOU 1260 N   ASP 185 1518    1599    2338   87 -225  2 7 6
ATOM   1261 CA  ASP 185 10.026  11.005  49.574 1.000 13.88
ANISOU 1261 CA  ASP 185 1875    1322    2078   141  -364 - 4 2
ATOM   1262 C   ASP 185 10.240  10.490  48.152 1.000 12.57
ANISOU 1262 C   ASP 185 1182    1385    2211   -160  -77  - 1 3 0
ATOM   1263 O   ASP 185 11.357  10.135  47.824 1.000 14.14
ANISOU 1263 O   ASP 185 1177    1637    2559   -135  146  1 4 0
ATOM   1264 CB  ASP 185 10.294  12.521  49.580 1.000 14.97
ANISOU 1264 CB  ASP 185 1879    1293    2517   121   -186 - 1 5 9
ATOM   1265 CG  ASP 185 9.702   13.155  50.830 1.000 17.61
ANISOU 1265 CG  ASP 185 2680    1659    2351   232   -13  - 1 7 2
ATOM   1266 OD1 ASP 185 9.507   12.466  51.856 1.000 23.69
ANISOU 1266 OD1 ASP 185 3553    3133    2314   443   -302 5 2 1
ATOM   1267 OD2 ASP 185 9.174   14.257  50.742 1.000 24.32
ANISOU 1267 OD2 ASP 185 4063    1730    3449   644   1140 - 1 6
ATOM   1268 N   LEU 186 9.141   10.465  47.382 1.000 12.57
ANISOU 1268 N   LEU 186 1271    1378    2126   -117  -117 - 1 1 7
ATOM   1269 CA  LEU 186 9.169   10.091  45.986 1.000 12.92
ANISOU 1269 CA  LEU 186 1533    1225    2150   -331  -84  - 1 7 5
ATOM   1270 C   LEU 186 9.134   11.292  45.052 1.000 14.12
ANISOU 1270 C   LEU 186 1730    1307    2330   -93   -165 5 5
ATOM   1271 O   LEU 186 8.971   11.173  43.849 1.000 20.12
ANISOU 1271 O   LEU 186 3721    1643    2280   -423  99 9 2
ATOM   1272 CB  LEU 186 8.040   9.106   45.609 1.000 13.72
ANISOU 1272 CB  LEU 186 1509    1310    2393   -270  -375 - 6
ATOM   1273 CG  LEU 186 8.020   7.811   46.438 1.000 15.92
ANISOU 1273 CG  LEU 186 1549    1141    3361   -145  -307 1 6 8
ATOM   1274 CD1 LEU 186 6.929   6.908   45.866 1.000 19.36
ANISOU 1274 CD1 LEU 186 1686    1845    3825   -700  -209 3 9 6
ATOM   1275 CD2 LEU 186 9.369   7.115   46.341 1.000 18.32
ANISOU 1275 CD2 LEU 186 1689    1742    3528   200   -432 1 7 9
ATOM   1276 N   SER 187 9.286   12.494  45.618 1.000 13.60
ANISOU 1276 N   SER 187 1326    1234    2608   -26   -95  1 3 7
ATOM   1277 CA  SER 187 9.388   13.734  44.826 1.000 13.22
ANISOU 1277 CA  SER 187 1489    1197    2338   -54   -68  2 9
ATOM   1278 C   SER 187 10.736  13.853  44.134 1.000 12.79
ANISOU 1278 C   SER 187 1482    1186    2192   -17   -114 - 9 0
ATOM   1279 O   SER 187 11.683  13.076  44.356 1.000 14.50
ANISOU 1279 O   SER 187 1532    1257    2720   76 -224  - 1 1 3
ATOM   1280 CB  SER 187 9.201   14.915  45.811 1.000 12.87
ANISOU 1280 CB  SER 187 1463    1282    2147   164   -154 9 8
ATOM   1281 OG  SER 187 10.296  14.873  46.716 1.000 13.22
ANISOU 1281 OG  SER 187 1589    1420    2015   -34   -143 2 2 4
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ATOM   1282 N   MET  188 10.898  14.844  43.292 1.000 13.44
ANISOU 1282 N   MET  188 1552    1334    2221    -64   -34  -26
ATOM   1283 CA  MET  188 12.215  15.380  42.878 1.000 12.11
ANISOU 1283 CA  MET  188 1508    1261    1833    29  -60  -61
ATOM   1284 C   MET  188 12.853  16.022  44.104 1.000 12.78
ANISOU 1284 C   MET  188 1563    1156    2136    167   -311  -42
ATOM   1285 O   MET  188 13.896  15.550  44.600 1.000 13.40
ANISOU 1285 O   MET  188 1408    1390    2294    116   -264  -26
ATOM   1286 CB  MET  188 12.038  16.300  41.667 1.000 13.66
ANISOU 1286 CB  MET  188 1565    1501    2123    44  -161  207
ATOM   1287 CG  MET  188 13.296  17.095  41.315 1.000 14.05
ANISOU 1287 CG  MET  188 1697    1595    2046    66  150  133
ATOM   1288 SD  MET  188 14.600  15.971  40.752 1.000 14.96
ANISOU 1288 SD  MET  188 1565    1591    2529    109   -81  110
ATOM   1289 CE  MET  188 16.005  17.102  40.686 1.000 17.74
ANISOU 1289 CE  MET  188 1852    2032    2855    -242  505  121
ATOM   1290 N   VAL  189 12.244  17.112  44.616 1.000 12.62
ANISOU 1290 N   VAL  189 1586    1203    2007    103   -147  -134
ATOM   1291 CA  VAL  189 12.565  17.671  45.918 1.000 12.60
ANISOU 1291 CA  VAL  189 1412    1438    1937    -228  -11  -44
ATOM   1292 C   VAL  189 11.285  17.968  46.679 1.000 11.71
ANISOU 1292 C   VAL  189 1328    1294    1825    -170  -171  -49
ATOM   1293 O   VAL  189 10.227  18.099  46.050 1.000 12.56
ANISOU 1293 O   VAL  189 1446    1291    2036    21  -320  -49
ATOM   1294 CB  VAL  189 13.440  18.955  45.856 1.000 12.95
ANISOU 1294 CB  VAL  189 1150    1517    2252    -174  -205  94
ATOM   1295 CG1 VAL  189 14.778  18.637  45.167 1.000 15.54
ANISOU 1295 CG1 VAL  189 1376    2094    2437    -140  161  91
ATOM   1296 CG2 VAL  189 12.730  20.056  45.082 1.000 15.00
ANISOU 1296 CG2 VAL  189 1763    1391    2547    -130  -483  81
ATOM   1297 N   THR  190 11.425  18.067  47.984 1.000 12.18
ANISOU 1297 N   THR  190 1445    1422    1760    -109  -130  10
ATOM   1298 CA  THR  190 10.353  18.454  48.897 1.000 11.98
ANISOU 1298 CA  THR  190 1292    1356    1903    -57   -221  -151
ATOM   1299 C   THR  190 10.879  19.630  49.710 1.000 12.47
ANISOU 1299 C   THR  190 1178    1436    2124    -32   -297  -232
ATOM   1300 O   THR  190 11.959  19.523  50.320 1.000 15.06
ANISOU 1300 O   THR  190 1424    1767    2531    46  -571  -446
ATOM   1301 CB  THR  190 9.913  17.297  49.808 1.000 13.16
ANISOU 1301 CB  THR  190 1509    1605    1886    -168  80  -121
ATOM   1302 OG1 THR  190 9.481  16.201  48.993 1.000 14.47
ANISOU 1302 OG1 THR  190 1693    1469    2334    -100  -25  -194
ATOM   1303 CG2 THR  190 8.778  17.723  50.734 1.000 14.79
ANISOU 1303 CG2 THR  190 1696    1510    2415    73  258  -89
ATOM   1304 N   LEU  191 10.148  20.724  49.732 1.000 12.97
ANISOU 1304 N   LEU  191 1329    1449    2149    23  -21  -286
ATOM   1305 CA  LEU  191 10.511  21.908  50.526 1.000 13.75
ANISOU 1305 CA  LEU  191 1543    1442    2238    78  -206  -301
ATOM   1306 C   LEU  191 9.603  21.964  51.763 1.000 14.47
ANISOU 1306 C   LEU  191 1543    1689    2265    83  -179  -412
ATOM   1307 O   LEU  191 8.370  21.868  51.645 1.000 16.58
ANISOU 1307 O   LEU  191 1517    2486    2297    219  -176  -725
ATOM   1308 CB  LEU  191 10.398  23.212  49.722 1.000 15.37
ANISOU 1308 CB  LEU  191 1717    1444    2680    58  -106  -189
ATOM   1309 CG  LEU  191 11.705  23.578  48.973 1.000 16.10
ANISOU 1309 CG  LEU  191 1747    1688    2680    -128  -113  -135
ATOM   1310 CD1 LEU  191 12.069  22.565  47.906 1.000 16.67
ANISOU 1310 CD1 LEU  191 2034    2093    2209    -23   -64  19
ATOM   1311 CD2 LEU  191 11.570  24.959  48.350 1.000 18.53
ANISOU 1311 CD2 LEU  191 2297    1906    2837    -345  -437  148
ATOM   1312 N   ILE  192 10.199  22.148  52.946 1.000 15.36
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ANISOU	1312	N	ILE	192	1479	2152	2204	-47	-165	-164
ATOM	1313	CA	ILE	192	9.417	22.162	54.194	1.000	15.13	
ANISOU	1313	CA	ILE	192	1456	2043	2251	-304	-173	-280
ATOM	1314	C	ILE	192	9.692	23.423	55.010	1.000	15.58	
ANISOU	1314	C	ILE	192	1696	1973	2251	-199	-254	-226
ATOM	1315	O	ILE	192	10.836	23.691	55.381	1.000	17.20	
ANISOU	1315	O	ILE	192	1856	2449	2229	-307	-341	-574
ATOM	1316	CB	ILE	192	9.722	20.920	55.040	1.000	17.03	
ANISOU	1316	CB	ILE	192	2246	1958	2266	-52	325	-303
ATOM	1317	CG1	ILE	192	9.454	19.596	54.317	1.000	19.80	
ANISOU	1317	CG1	ILE	192	3040	2010	2473	-71	128	-382
ATOM	1318	CG2	ILE	192	8.995	20.967	56.403	1.000	18.14	
ANISOU	1318	CG2	ILE	192	2278	2354	2262	229	290	-258
ATOM	1319	CD1	ILE	192	9.420	18.387	55.235	1.000	31.57	
ANISOU	1319	CD1	ILE	192	4658	2114	5222	-398	-1094	765
ATOM	1320	N	GLN	193	8.625	24.172	55.249	1.000	17.04	
ANISOU	1320	N	GLN	193	2042	2185	2248	112	-380	-301
ATOM	1321	CA	GLN	193	8.680	25.291	56.201	1.000	17.70	
ANISOU	1321	CA	GLN	193	1737	2167	2824	-204	-186	-559
ATOM	1322	C	GLN	193	7.898	24.869	57.443	1.000	19.67	
ANISOU	1322	C	GLN	193	1882	2624	2969	-232	211	-840
ATOM	1323	O	GLN	193	7.082	23.942	57.426	1.000	26.60	
ANISOU	1323	O	GLN	193	2066	3843	4197	-965	-110	62
ATOM	1324	CB	GLN	193	8.129	26.598	55.643	1.000	23.74	
ANISOU	1324	CB	GLN	193	3070	2388	3561	500	-98	-514
ATOM	1325	CG	GLN	193	8.913	27.304	54.559	1.000	28.26	
ANISOU	1325	CG	GLN	193	4664	2384	3689	656	209	0
ATOM	1326	CD	GLN	193	8.338	28.665	54.156	1.000	26.30	
ANISOU	1326	CD	GLN	193	2868	2943	4181	791	3	111
ATOM	1327	OE1	GLN	193	7.193	28.695	53.688	1.000	45.31	
ANISOU	1327	OE1	GLN	193	2826	7147	7241	-51	-616	3173
ATOM	1328	NE2	GLN	193	9.080	29.748	54.345	1.000	30.44	
ANISOU	1328	NE2	GLN	193	3609	2588	5368	418	1259	692
ATOM	1329	N	GLN	194	8.241	25.259	58.645	1.000	22.04	
ANISOU	1329	N	GLN	194	2926	2758	2690	303	-368	-83
ATOM	1330	CA	GLN	194	7.569	24.793	59.847	1.000	22.68	
ANISOU	1330	CA	GLN	194	3144	2617	2855	82	-230	-150
ATOM	1331	C	GLN	194	7.275	26.054	60.663	1.000	22.19	
ANISOU	1331	C	GLN	194	2809	2768	2856	117	-396	-320
ATOM	1332	O	GLN	194	7.889	27.100	60.418	1.000	25.26	
ANISOU	1332	O	GLN	194	4041	2877	2679	-313	-21	-411
ATOM	1333	CB	GLN	194	8.467	23.943	60.739	1.000	29.21	
ANISOU	1333	CB	GLN	194	4493	2707	3899	477	-50	939
ATOM	1334	CG	GLN	194	9.105	22.735	60.083	1.000	28.80	
ANISOU	1334	CG	GLN	194	3108	3530	4305	576	-121	494
ATOM	1335	CD	GLN	194	10.296	22.332	60.962	1.000	31.97	
ANISOU	1335	CD	GLN	194	2961	5384	3800	824	359	1075
ATOM	1336	OE1	GLN	194	11.421	22.325	60.474	1.000	27.28	
ANISOU	1336	OE1	GLN	194	2781	4189	3397	118	133	-249
ATOM	1337	NE2	GLN	194	9.998	22.100	62.232	1.000	29.82	
ANISOU	1337	NE2	GLN	194	3540	3958	3832	989	645	800
ATOM	1338	N	THR	195	6.419	25.891	61.658	1.000	23.30	
ANISOU	1338	N	THR	195	2407	3058	3387	-211	-235	-720
ATOM	1339	CA	THR	195	6.476	26.833	62.768	1.000	27.14	
ANISOU	1339	CA	THR	195	3459	3544	3308	25	-50	-890
ATOM	1340	C	THR	195	6.933	25.997	63.958	1.000	26.11	
ANISOU	1340	C	THR	195	3825	2829	3268	558	19	-1247
ATOM	1341	O	THR	195	6.639	24.815	63.994	1.000	28.17	
ANISOU	1341	O	THR	195	2973	2916	4815	481	171	-1030
ATOM	1342	CB	THR	195	5.149	27.534	63.069	1.000	25.87	
ANISOU	1342	CB	THR	195	3428	2849	3551	-16	-592	-1137

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ATOM   1343 OG1 THR  195 4.111   26.550  63.196 1.000 25.45
ANISOU 1343 OG1 THR  195 3427    3101    3141   -9 -117  -750
ATOM   1344 CG2 THR  195 4.788   28.396  61.847 1.000 31.31
ANISOU 1344 CG2 THR  195 4965    2552    4380   274  -70  -409
ATOM   1345 N   PRO  196 7.604   26.587  64.923 1.000 30.84
ANISOU 1345 N   PRO  196 5225    3191    3300   785  -517 -1542
ATOM   1346 CA  PRO  196 8.101   25.823  66.065 1.000 28.50
ANISOU 1346 CA  PRO  196 3113    3700    4016   -279 -441 -646
ATOM   1347 C   PRO  196 7.018   25.534  67.096 1.000 28.97
ANISOU 1347 C   PRO  196 3581    3326    4102   42 113 -1381
ATOM   1348 O   PRO  196 6.002   26.229  67.192 1.000 32.32
ANISOU 1348 O   PRO  196 4146    4649    3485   901  -180 -1658
ATOM   1349 CB  PRO  196 9.094   26.816  66.694 1.000 29.72
ANISOU 1349 CB  PRO  196 3888    3292    4111   -285 -353 -1072
ATOM   1350 CG  PRO  196 8.533   28.174  66.364 1.000 34.87
ANISOU 1350 CG  PRO  196 6285    3575    3390   421  -1326 -1332
ATOM   1351 CD  PRO  196 7.897   28.035  65.012 1.000 33.20
ANISOU 1351 CD  PRO  196 6407    3606    2600   -598 -494 -1031
ATOM   1352 N   CYS  197 7.289   24.533  67.919 1.000 26.96
ANISOU 1352 N   CYS  197 2739    4038    3465   -113  85 -1227
ATOM   1353 CA  CYS  197 6.519   24.289  69.126 1.000 31.73
ANISOU 1353 CA  CYS  197 3979    4543    3533   -39  721  -1726
ATOM   1354 C   CYS  197 6.803   25.412  70.124 1.000 35.58
ANISOU 1354 C   CYS  197 4213    4819    4486   -480 1126 -2282
ATOM   1355 O   CYS  197 7.917   25.939  70.175 1.000 31.34
ANISOU 1355 O   CYS  197 3817    4845    3246   36 -383  -992
ATOM   1356 CB  CYS  197 6.940   22.962  69.767 1.000 35.79
ANISOU 1356 CB  CYS  197 5913    4705    2980   284   1566 -1423
ATOM   1357 SG  CYS  197 6.553   21.535  68.741 1.000 28.53
ANISOU 1357 SG  CYS  197 3605    4224    3009   50 -5 -452
ATOM   1358 N   ALA  198 5.771   25.791  70.866 1.000 37.27
ANISOU 1358 N   ALA  198 5038    4984    4139   -421  1647 -2070
ATOM   1359 CA  ALA  198 5.983   26.811  71.888 1.000 35.91
ANISOU 1359 CA  ALA  198 6273    4144    3230   910   522  -1230
ATOM   1360 C   ALA  198 6.993   26.328  72.921 1.000 44.30
ANISOU 1360 C   ALA  198 5998    6138    4696   -193  -199 3 3
ATOM   1361 O   ALA  198 7.759   27.127  73.457 1.000 42.85
ANISOU 1361 O   ALA  198 5209    6328    4742   7  490 -555
ATOM   1362 CB  ALA  198 4.671   27.231  72.532 1.000 41.70
ANISOU 1362 CB  ALA  198 7588    5697    2557   2355  1068 -721
ATOM   1363 N   ASN  199 7.036   25.036  73.225 1.000 34.93
ANISOU 1363 N   ASN  199 4027    5975    3270   805   167  -621
ATOM   1364 CA  ASN  199 7.969   24.578  74.264 1.000 33.58
ANISOU 1364 CA  ASN  199 3643    6167    2950   -670  -265 -808
ATOM   1365 C   ASN  199 9.352   24.262  73.718 1.000 31.53
ANISOU 1365 C   ASN  199 4077    5048    2853   384  -420 -855
ATOM   1366 O   ASN  199 10.153  23.667  74.467 1.000 36.33
ANISOU 1366 O   ASN  199 4223    5624    3957   -403 -1305  -126
ATOM   1367 CB  ASN  199 7.441   23.308  74.929 1.000 36.38
ANISOU 1367 CB  ASN  199 4533    5029    4262   859   584  -522
ATOM   1368 CG  ASN  199 7.198   22.180  73.952 1.000 31.28
ANISOU 1368 CG  ASN  199 4030    4863    2993   882   202  178
ATOM   1369 OD1 ASN  199 7.743   22.151  72.853 1.000 37.62
ANISOU 1369 OD1 ASN  199 4693    6272    3330   122   728  -56
ATOM   1370 ND2 ASN  199 6.393   21.190  74.314 1.000 36.42
ANISOU 1370 ND2 ASN  199 3508    6251    4078   -13   1132 -958
ATOM   1371 N   GLY  200 9.616   24.569  72.449 1.000 30.93
ANISOU 1371 N   GLY  200 4342    4232    3179   436   144  -692
ATOM   1372 CA  GLY  200 10.920  24.304  71.866 1.000 35.26
ANISOU 1372 CA  GLY  200 4430    4905    4060   -317  480  -2400
ATOM   1373 C   GLY  200 11.184  22.886  71.429 1.000 36.83
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ANISOU 1373  C   GLY  200 4683    4375    4936    -360   1601  -1460
ATOM   1374  O   GLY  200 12.257  22.566  70.897  1.000  32.71
ANISOU 1374  O   GLY  200 3921    4072    4436    -377    752  -1400
ATOM   1375  N   PHE  201 10.264  21.939  71.588  1.000  28.66
ANISOU 1375  N   PHE  201 3813    4229    2847     145    463   -326
ATOM   1376  CA  PHE  201 10.491  20.575  71.106  1.000  27.55
ANISOU 1376  CA  PHE  201 3190    4337    2943    -233    219   -672
ATOM   1377  C   PHE  201 10.752  20.553  69.600  1.000  24.89
ANISOU 1377  C   PHE  201 2943    3682    2832     190   -268   -379
ATOM   1378  O   PHE  201 9.994   21.255  68.910  1.000  28.22
ANISOU 1378  O   PHE  201 3583    3184    3957      10   -421    277
ATOM   1379  CB  PHE  201 9.250   19.729  71.413  1.000  30.46
ANISOU 1379  CB  PHE  201 3153    4862    3560    -371    -40    -73
ATOM   1380  CG  PHE  201 9.425   18.262  71.027  1.000  34.89
ANISOU 1380  CG  PHE  201 4015    4609    4632    -772    162     89
ATOM   1381  CD1 PHE  201 10.395  17.472  71.605  1.000  31.18
ANISOU 1381  CD1 PHE  201 3436    4103    4310    -875    -93   -1105
ATOM   1382  CD2 PHE  201 8.613   17.681  70.078  1.000  28.84
ANISOU 1382  CD2 PHE  201 2979    4019    3960     329    612   -107
ATOM   1383  CE1 PHE  201 10.564  16.160  71.240  1.000  37.73
ANISOU 1383  CE1 PHE  201 6489    3608    4239    -1078  -1475   -500
ATOM   1384  CE2 PHE  201 8.761   16.363  69.679  1.000  31.78
ANISOU 1384  CE2 PHE  201 4327    3911    3838     652    250    119
ATOM   1385  CZ  PHE  201 9.755   15.606  70.265  1.000  29.78
ANISOU 1385  CZ  PHE  201 3705    3397    4211       6   -638   -849
ATOM   1386  N   VAL  202 11.706  19.751  69.144  1.000  23.51
ANISOU 1386  N   VAL  202 2671    3392    2868    -292     -1   -578
ATOM   1387  CA  VAL  202 11.969  19.626  67.706  1.000  26.37
ANISOU 1387  CA  VAL  202 3025    4050    2946    -667     57   -724
ATOM   1388  C   VAL  202 11.423  18.283  67.198  1.000  22.75
ANISOU 1388  C   VAL  202 2729    3348    2567      96   -120   -435
ATOM   1389  O   VAL  202 11.880  17.190  67.541  1.000  28.71
ANISOU 1389  O   VAL  202 3249    3799    3859     119     316    661
ATOM   1390  CB  VAL  202 13.476  19.721  67.415  1.000  24.99
ANISOU 1390  CB  VAL  202 3060    3427    3008    -278    283    152
ATOM   1391  CG1 VAL  202 13.715  19.464  65.938  1.000  27.70
ANISOU 1391  CG1 VAL  202 4642    2577    3307      87   1014     -3
ATOM   1392  CG2 VAL  202 14.050  21.071  67.823  1.000  26.80
ANISOU 1392  CG2 VAL  202 2826    3868    3487    -490    474   -398
ATOM   1393  N   SER  203 10.405  18.402  66.333  1.000  24.10
ANISOU 1393  N   SER  203 2194    3607    3356     -31   -179   -528
ATOM   1394  CA  SER  203 9.634   17.231  65.940  1.000  23.70
ANISOU 1394  CA  SER  203 2373    3584    3046    -290    308   -533
ATOM   1395  C   SER  203 10.168  16.511  64.710  1.000  21.28
ANISOU 1395  C   SER  203 2173    3041    2871      46    227    -42
ATOM   1396  O   SER  203 10.159  15.285  64.640  1.000  27.60
ANISOU 1396  O   SER  203 4105    3097    3284    -482   1010   -249
ATOM   1397  CB  SER  203 8.148   17.571  65.685  1.000  29.06
ANISOU 1397  CB  SER  203 2251    3790    5001    -180    203   -2064
ATOM   1398  OG  SER  203 7.584   18.175  66.843  1.000  32.55
ANISOU 1398  OG  SER  203 3840    4298    4231     920   1099   -382
ATOM   1399  N   LEU  204 10.688  17.233  63.724  1.000  22.46
ANISOU 1399  N   LEU  204 2476    3013    3043     79    450    -46
ATOM   1400  CA  LEU  204 11.166  16.530  62.544  1.000  20.26
ANISOU 1400  CA  LEU  204 2200    2831    2667     45    -18    -15
ATOM   1401  C   LEU  204 12.595  16.038  62.747  1.000  18.83
ANISOU 1401  C   LEU  204 2151    2528    2477     -75     60     -1
ATOM   1402  O   LEU  204 13.443  16.783  63.251  1.000  20.47
ANISOU 1402  O   LEU  204 2333    2386    3059    -303   -195   404
ATOM   1403  CB  LEU  204 11.103  17.486  61.362  1.000  21.42
ANISOU 1403  CB  LEU  204 2718    2548    2871     311    -16    -8
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ATOM   1404 CG  LEU  204 9.769   18.188  61.079 1.000 33.57
ANISOU 1404 CG  LEU  204 2820    4319    5617   177   -1316 1172
ATOM   1405 CD1 LEU  204 9.797   18.747  59.660 1.000 36.19
ANISOU 1405 CD1 LEU  204 4402    3807    5540   1276  -1167 987
ATOM   1406 CD2 LEU  204 8.581   17.234  61.219 1.000 37.76
ANISOU 1406 CD2 LEU  204 3058    5328    5960   -526  -1896 686
ATOM   1407 N   GLN  205 12.864  14.836  62.284 1.000 20.33
ANISOU 1407 N   GLN  205 2518    2644    2563   104   -31  -129
ATOM   1408 CA  GLN  205 14.209  14.247  62.335 1.000 18.88
ANISOU 1408 CA  GLN  205 2522    2225    2425   -6 -181  3 6
ATOM   1409 C   GLN  205 14.512  13.504  61.036 1.000 18.19
ANISOU 1409 C   GLN  205 1986    2383    2543   -143  -188 - 80
ATOM   1410 O   GLN  205 13.577  13.033  60.408 1.000 19.87
ANISOU 1410 O   GLN  205 1974    3063    2514   -125  -212 - 237
ATOM   1411 CB  GLN  205 14.296  13.267  63.493 1.000 24.25
ANISOU 1411 CB  GLN  205 3948    2716    2548   202   -343 296
ATOM   1412 CG  GLN  205 14.164  13.948  64.856 1.000 30.64
ANISOU 1412 CG  GLN  205 4099    5159    2382   850   -327 - 89
ATOM   1413 CD  GLN  205 14.744  13.078  65.948 1.000 28.28
ANISOU 1413 CD  GLN  205 4473    3633    2640   -161  -1015 - 390
ATOM   1414 OE1 GLN  205 14.307  11.921  66.041 1.000 37.69
ANISOU 1414 OE1 GLN  205 5733    5073    3515   -2145 -699 478
ATOM   1415 NE2 GLN  205 15.710  13.553  66.711 1.000 40.53
ANISOU 1415 NE2 GLN  205 6798    4417    4185   -1341 -2865 323
ATOM   1416 N   ALA  206 15.752  13.471  60.576 1.000 18.52
ANISOU 1416 N   ALA  206 2070    2199    2769   -240  -13  4
ATOM   1417 CA  ALA  206 16.152  12.700  59.405 1.000 18.42
ANISOU 1417 CA  ALA  206 2074    2351    2575   -100  -158 2 3
ATOM   1418 C   ALA  206 17.343  11.802  59.738 1.000 17.41
ANISOU 1418 C   ALA  206 2107    2158    2350   -185  -254 - 17
ATOM   1419 O   ALA  206 18.123  12.203  60.613 1.000 20.67
ANISOU 1419 O   ALA  206 2469    2410    2973   -48   -711 - 396
ATOM   1420 CB  ALA  206 16.637  13.599  58.270 1.000 18.77
ANISOU 1420 CB  ALA  206 2119    2310    2703   156   -65  147
ATOM   1421 N   GLU  207 17.492  10.764  58.931 1.000 18.09
ANISOU 1421 N   GLU  207 2092    2101    2680   -249  -496 - 162
ATOM   1422 CA  GLU  207 18.710  9.944   58.966 1.000 19.48
ANISOU 1422 CA  GLU  207 2210    2091    3100   -73   -432 - 44
ATOM   1423 C   GLU  207 19.851  10.730  58.320 1.000 19.98
ANISOU 1423 C   GLU  207 2018    2233    3342   220   -560 544
ATOM   1424 O   GLU  207 19.732  11.068  57.143 1.000 20.33
ANISOU 1424 O   GLU  207 2000    2753    2970   5  -471  8 9
ATOM   1425 CB  GLU  207 18.566  8.623   58.214 1.000 24.03
ANISOU 1425 CB  GLU  207 3401    1784    3946   316   -1226 6 1
ATOM   1426 CG  GLU  207 19.757  7.674   58.295 1.000 24.35
ANISOU 1426 CG  GLU  207 3223    1907    4121   354   93 467
ATOM   1427 CD  GLU  207 20.730  7.791   57.129 1.000 31.69
ANISOU 1427 CD  GLU  207 2729    5178    4134   -1218 -175 122
ATOM   1428 OE1 GLU  207 20.376  7.611   55.943 1.000 26.97
ANISOU 1428 OE1 GLU  207 2849    3404    3993   31 -256  309
ATOM   1429 OE2 GLU  207 21.908  8.121   57.407 1.000 30.70
ANISOU 1429 OE2 GLU  207 2484    3416    5764   -233  -342 - 1168
ATOM   1430 N   VAL  208 20.919  10.936  59.078 1.000 18.53
ANISOU 1430 N   VAL  208 2020    2112    2907   130   -362 320
ATOM   1431 CA  VAL  208 22.150  11.547  58.541 1.000 19.53
ANISOU 1431 CA  VAL  208 2044    2238    3137   39 -476  630
ATOM   1432 C   VAL  208 23.341  10.755  59.088 1.000 21.95
ANISOU 1432 C   VAL  208 2040    2792    3507   225   -461 797
ATOM   1433 O   VAL  208 23.460  10.663  60.314 1.000 23.82
ANISOU 1433 O   VAL  208 2262    3240    3547   -40   -858 825
ATOM   1434 CB  VAL  208 22.271  13.027  58.905 1.000 19.72
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ANISOU	1434	CB	VAL	208	1918	2429	3145	-47	-308	311
ATOM	1435	CG1	VAL	208	23.524	13.626	58.281	1.000	23.14	
ANISOU	1435	CG1	VAL	208	2524	2374	3895	-202	284	349
ATOM	1436	CG2	VAL	208	21.030	13.812	58.469	1.000	19.47	
ANISOU	1436	CG2	VAL	208	2462	2279	2658	232	-667	-87
ATOM	1437	N	GLY	209	24.180	10.169	58.246	1.000	23.88	
ANISOU	1437	N	GLY	209	2500	2449	4123	465	-711	36
ATOM	1438	CA	GLY	209	25.306	9.374	58.773	1.000	26.42	
ANISOU	1438	CA	GLY	209	1987	3599	4450	460	-487	516
ATOM	1439	C	GLY	209	24.905	8.250	59.695	1.000	30.01	
ANISOU	1439	C	GLY	209	3469	3240	4693	238	-1422	732
ATOM	1440	O	GLY	209	25.609	7.835	60.629	1.000	31.45	
ANISOU	1440	O	GLY	209	4053	4458	3438	1225	-897	83
ATOM	1441	N	GLY	210	23.691	7.702	59.523	1.000	26.64	
ANISOU	1441	N	GLY	210	3165	3214	3744	259	-86	350
ATOM	1442	CA	GLY	210	23.263	6.585	60.360	1.000	29.78	
ANISOU	1442	CA	GLY	210	4603	3091	3619	-55	-997	584
ATOM	1443	C	GLY	210	22.622	6.993	61.663	1.000	38.28	
ANISOU	1443	C	GLY	210	5827	4212	4507	-2536	732	50
ATOM	1444	O	GLY	210	22.160	6.187	62.481	1.000	41.45	
ANISOU	1444	O	GLY	210	4152	6516	5082	-1874	-567	2346
ATOM	1445	N	ALA	211	22.512	8.274	61.976	1.000	32.81	
ANISOU	1445	N	ALA	211	4803	4625	3037	1372	-1177	632
ATOM	1446	CA	ALA	211	21.828	8.603	63.235	1.000	35.62	
ANISOU	1446	CA	ALA	211	3993	5958	3584	1061	-610	970
ATOM	1447	C	ALA	211	20.663	9.543	62.940	1.000	31.43	
ANISOU	1447	C	ALA	211	3508	4737	3699	302	69	1854
ATOM	1448	O	ALA	211	20.652	10.097	61.858	1.000	28.28	
ANISOU	1448	O	ALA	211	3661	4062	3020	-571	-551	1010
ATOM	1449	CB	ALA	211	22.812	9.278	64.170	1.000	41.36	
ANISOU	1449	CB	ALA	211	3644	8904	3169	1372	-18	-791
ATOM	1450	N	PHE	212	19.682	9.676	63.825	1.000	36.68	
ANISOU	1450	N	PHE	212	5211	4237	4489	1166	1265	2171
ATOM	1451	CA	PHE	212	18.620	10.654	63.641	1.000	28.82	
ANISOU	1451	CA	PHE	212	4490	3167	3293	263	504	1037
ATOM	1452	C	PHE	212	19.100	12.023	64.124	1.000	34.72	
ANISOU	1452	C	PHE	212	6746	3760	2685	-248	-539	776
ATOM	1453	O	PHE	212	19.667	12.191	65.210	1.000	39.12	
ANISOU	1453	O	PHE	212	6144	5384	3335	-549	-1129	1220
ATOM	1454	CB	PHE	212	17.358	10.219	64.388	1.000	45.35	
ANISOU	1454	CB	PHE	212	6376	2569	8288	1348	3748	2314
ATOM	1455	N	THR	213	18.906	13.008	63.271	1.000	26.30	
ANISOU	1455	N	THR	213	4134	2738	3122	662	-581	100
ATOM	1456	CA	THR	213	19.424	14.359	63.433	1.000	25.08	
ANISOU	1456	CA	THR	213	3587	2852	3089	767	-810	-323
ATOM	1457	C	THR	213	18.190	15.283	63.400	1.000	23.81	
ANISOU	1457	C	THR	213	2835	2652	3560	215	-855	-643
ATOM	1458	O	THR	213	17.329	15.137	62.517	1.000	21.40	
ANISOU	1458	O	THR	213	2640	2269	3223	-328	-580	-179
ATOM	1459	CB	THR	213	20.398	14.759	62.308	1.000	27.60	
ANISOU	1459	CB	THR	213	3155	3220	4113	189	-356	-798
ATOM	1460	OG1	THR	213	21.673	14.084	62.374	1.000	32.00	
ANISOU	1460	OG1	THR	213	3582	4220	4356	746	-410	520
ATOM	1461	CG2	THR	213	20.735	16.254	62.355	1.000	29.45	
ANISOU	1461	CG2	THR	213	4422	3320	3448	-106	-1265	-204
ATOM	1462	N	ASP	214	18.119	16.177	64.371	1.000	21.05	
ANISOU	1462	N	ASP	214	2790	2236	2972	-82	-380	-142
ATOM	1463	CA	ASP	214	17.001	17.110	64.462	1.000	20.61	
ANISOU	1463	CA	ASP	214	2742	2095	2993	-117	-898	-379
ATOM	1464	C	ASP	214	16.994	18.030	63.226	1.000	20.58	
ANISOU	1464	C	ASP	214	2373	2525	2923	182	-169	-237

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ATOM   1465 O   ASP  214  18.018  18.430  62.678 1.000 23.02
ANISOU 1465 O   ASP  214   2461    2883    3404   -167   -52   -572
ATOM   1466 CB  ASP  214  17.205  18.058  65.637 1.000 23.54
ANISOU 1466 CB  ASP  214   3304    2607    3032    -92   -748   -668
ATOM   1467 CG  ASP  214  16.915  17.506  67.004 1.000 24.93
ANISOU 1467 CG  ASP  214   3545    2850    3079    450   -417   -614
ATOM   1468 OD1 ASP  214  16.357  16.395  67.113 1.000 29.17
ANISOU 1468 OD1 ASP  214   4134    3070    3878    202   -705   262
ATOM   1469 OD2 ASP  214  17.276  18.191  67.990 1.000 34.38
ANISOU 1469 OD2 ASP  214   6917    3040    3107   1017  -1413   -736
ATOM   1470 N   LEU  215  15.802  18.452  62.859 1.000 20.74
ANISOU 1470 N   LEU  215   2426    2372    3081    86   -60   306
ATOM   1471 CA  LEU  215  15.568  19.401  61.796 1.000 20.55
ANISOU 1471 CA  LEU  215   2895    2013    2899   -202   -178   141
ATOM   1472 C   LEU  215  14.724  20.552  62.332 1.000 19.02
ANISOU 1472 C   LEU  215   2482    2240    2504   -142   -34   321
ATOM   1473 O   LEU  215  13.510  20.613  62.142 1.000 22.39
ANISOU 1473 O   LEU  215   2635    2483    3389   -160   -475   573
ATOM   1474 CB  LEU  215  14.826  18.722  60.650 1.000 22.04
ANISOU 1474 CB  LEU  215   2778    2510    3086   -140   -261   -65
ATOM   1475 CG  LEU  215  15.598  17.502  60.128 1.000 25.25
ANISOU 1475 CG  LEU  215   3680    2829    3085    85   -166   -402
ATOM   1476 CD1 LEU  215  14.680  16.736  59.174 1.000 27.12
ANISOU 1476 CD1 LEU  215   4886    2934    2482    419  -1128   -65
ATOM   1477 CD2 LEU  215  16.881  18.046  59.510 1.000 30.76
ANISOU 1477 CD2 LEU  215   3434    3089    5165   1003   524   561
ATOM   1478 N   PRO  216  15.383  21.433  63.078 1.000 19.68
ANISOU 1478 N   PRO  216   2407    2191    2879   -157   148   103
ATOM   1479 CA  PRO  216  14.665  22.534  63.708 1.000 22.42
ANISOU 1479 CA  PRO  216   2869    2812    2836   272   10   -228
ATOM   1480 C   PRO  216  14.201  23.576  62.698 1.000 25.36
ANISOU 1480 C   PRO  216   4118    2433    3086   566   -131   -315
ATOM   1481 O   PRO  216  14.700  23.759  61.586 1.000 24.67
ANISOU 1481 O   PRO  216   3682    2406    3284   187   -176   -26
ATOM   1482 CB  PRO  216  15.693  23.092  64.676 1.000 23.88
ANISOU 1482 CB  PRO  216   3108    3049    2917   -216   116   -318
ATOM   1483 CG  PRO  216  17.033  22.701  64.146 1.000 28.31
ANISOU 1483 CG  PRO  216   2994    2996    4766   -88   -117   -1454
ATOM   1484 CD  PRO  216  16.807  21.405  63.436 1.000 24.55
ANISOU 1484 CD  PRO  216   2353    1777    5197   -436   -83   -348
ATOM   1485 N   TYR  217  13.154  24.287  63.102 1.000 24.13
ANISOU 1485 N   TYR  217   3237    2704    3229   244   -631   -511
ATOM   1486 CA  TYR  217  12.676  25.510  62.462 1.000 26.08
ANISOU 1486 CA  TYR  217   2514    2899    4498   104   -592   39
ATOM   1487 C   TYR  217  13.824  26.516  62.369 1.000 25.24
ANISOU 1487 C   TYR  217   3049    2948    3592   -257   -506   -538
ATOM   1488 O   TYR  217  14.570  26.675  63.340 1.000 31.78
ANISOU 1488 O   TYR  217   4114    2863    5096   -352  -2151   564
ATOM   1489 CB  TYR  217  11.559  26.103  63.315 1.000 25.97
ANISOU 1489 CB  TYR  217   2747    2773    4346    86   -615   -167
ATOM   1490 CG  TYR  217  11.189  27.543  63.125 1.000 31.64
ANISOU 1490 CG  TYR  217   3080    2803    6139   338  -1473   -644
ATOM   1491 CD1 TYR  217  10.430  27.928  62.022 1.000 27.85
ANISOU 1491 CD1 TYR  217   2238    3029    5314   511   -175   93
ATOM   1492 CD2 TYR  217  11.512  28.522  64.069 1.000 38.49
ANISOU 1492 CD2 TYR  217   4721    2813    7093   -686  -1682   -749
ATOM   1493 CE1 TYR  217  10.021  29.219  61.772 1.000 26.53
ANISOU 1493 CE1 TYR  217   1908    2675    5496   -41   107   69
ATOM   1494 CE2 TYR  217  11.113  29.835  63.827 1.000 42.90
ANISOU 1494 CE2 TYR  217   7112    2347    6842  -1415  -1949   -218
ATOM   1495 CZ  TYR  217  10.373  30.168  62.712 1.000 34.93
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ANISOU 1495 CZ  TYR  217 4042    2747    6483   -1462 -545 166
ATOM   1496 OH  TYR  217 9.996   31.486  62.473 1.000 36.41
ANISOU 1496 OH  TYR  217 5499    2895    5439   -753  -250 -289
ATOM   1497 N   ARG  218 14.022  27.110  61.218 1.000 25.58
ANISOU 1497 N   ARG  218 3461    2406    3852   -227  -533 -476
ATOM   1498 CA  ARG  218 14.923  28.243  61.049 1.000 29.26
ANISOU 1498 CA  ARG  218 3630    3270    4219   -784  -1349 268
ATOM   1499 C   ARG  218 14.113  29.336  60.365 1.000 24.81
ANISOU 1499 C   ARG  218 4063    2949    2415   -382  -228 -56
ATOM   1500 O   ARG  218 13.746  29.174  59.212 1.000 29.56
ANISOU 1500 O   ARG  218 6298    2267    2666   -890  -994 165
ATOM   1501 CB  ARG  218 16.162  27.823  60.256 1.000 35.90
ANISOU 1501 CB  ARG  218 3223    3685    6732   -624  -703 896
ATOM   1502 CG  ARG  218 17.369  28.665  60.661 1.000 51.38
ANISOU 1502 CG  ARG  218 4740    6768    8015   -3031 430  -183
ATOM   1503 CD  ARG  218 18.539  28.606  59.701 1.000 38.84
ANISOU 1503 CD  ARG  218 4968    6308    3482   -3596 -1165 1647
ATOM   1504 NE  ARG  218 19.343  27.395  59.905 1.000 45.09
ANISOU 1504 NE  ARG  218 4655    7495    4982   -2325 -962 -94
ATOM   1505 CZ  ARG  218 20.272  27.208  58.959 1.000 55.53
ANISOU 1505 CZ  ARG  218 5299    11458   4340   -2701 -1188 -1948
ATOM   1506 NH1 ARG  218 20.289  28.158  58.031 1.000 60.85
ANISOU 1506 NH1 ARG  218 2399    16648   4071   -1943 -1333 548
ATOM   1507 NH2 ARG  218 21.060  26.165  59.001 1.000 60.37
ANISOU 1507 NH2 ARG  218 8580    10111   4247   -2152 639  -4241
ATOM   1508 N   PRO  219 13.871  30.496  60.972 1.000 25.89
ANISOU 1508 N   PRO  219 2625    4126    3086   35 296 -1014
ATOM   1509 CA  PRO  219 13.065  31.548  60.326 1.000 28.10
ANISOU 1509 CA  PRO  219 2828    3120    4730   -410  379  -696
ATOM   1510 C   PRO  219 13.636  31.959  58.981 1.000 28.43
ANISOU 1510 C   PRO  219 3141    3010    4653   -190  116  -328
ATOM   1511 O   PRO  219 12.904  32.393  58.081 1.000 34.17
ANISOU 1511 O   PRO  219 4734    3500    4750   302   -798 -893
ATOM   1512 CB  PRO  219 13.115  32.717  61.316 1.000 39.70
ANISOU 1512 CB  PRO  219 5621    3612    5852   -500  1615 -1527
ATOM   1513 CG  PRO  219 13.368  32.033  62.628 1.000 42.38
ANISOU 1513 CG  PRO  219 6139    5277    4688   -257  2084 -2086
ATOM   1514 CD  PRO  219 14.370  30.943  62.289 1.000 32.77
ANISOU 1514 CD  PRO  219 3901    5719    2831   -602  828  -1603
ATOM   1515 N   ASP  220 14.950  31.824  58.811 1.000 25.65
ANISOU 1515 N   ASP  220 3328    1582    4837   -276  801  -878
ATOM   1516 CA  ASP  220 15.590  32.280  57.587 1.000 26.45
ANISOU 1516 CA  ASP  220 3594    2115    4341   -782  248  -861
ATOM   1517 C   ASP  220 15.781  31.305  56.451 1.000 28.46
ANISOU 1517 C   ASP  220 3549    1843    5423   -111  1638 -943
ATOM   1518 O   ASP  220 16.432  31.620  55.433 1.000 25.80
ANISOU 1518 O   ASP  220 3249    2021    4533   -140  623  -412
ATOM   1519 CB  ASP  220 16.911  32.962  57.998 1.000 33.76
ANISOU 1519 CB  ASP  220 2351    3539    6938   -445  1187 -1724
ATOM   1520 CG  ASP  220 17.882  31.913  58.502 1.000 42.36
ANISOU 1520 CG  ASP  220 2653    3531    9912   -812  230  -957
ATOM   1521 OD1 ASP  220 17.484  31.170  59.423 1.000 37.00
ANISOU 1521 OD1 ASP  220 3154    4148    6757   -104  -410 -2001
ATOM   1522 OD2 ASP  220 18.981  31.787  57.957 1.000 37.34
ANISOU 1522 OD2 ASP  220 2520    4700    6969   93 -824  -1266
ATOM   1523 N   ALA  221 15.292  30.072  56.537 1.000 24.79
ANISOU 1523 N   ALA  221 4148    1872    3398   -252  671  -659
ATOM   1524 CA  ALA  221 15.695  29.016  55.596 1.000 19.17
ANISOU 1524 CA  ALA  221 2165    1868    3251   -52  -92  -610
ATOM   1525 C   ALA  221 14.551  27.996  55.479 1.000 18.60
ANISOU 1525 C   ALA  221 1920    2238    2908   -82  -207 -362
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ATOM   1526 O   ALA  221 13.763  27.852  56.415 1.000 26.47
ANISOU 1526 O   ALA  221 4127    2641    3289   -1307 894  -904
ATOM   1527 CB  ALA  221 16.939  28.316  56.104 1.000 19.36
ANISOU 1527 CB  ALA  221 2054    2333    2969   -537  -316 6  6
ATOM   1528 N   VAL  222 14.490  27.385  54.313 1.000 17.35
ANISOU 1528 N   VAL  222 2089    1841    2661   -101  -323 -154
ATOM   1529 CA  VAL  222 13.556  26.276  54.083 1.000 17.45
ANISOU 1529 CA  VAL  222 1620    2004    3004   -66   -417 1  9
ATOM   1530 C   VAL  222 14.333  24.965  54.077 1.000 15.69
ANISOU 1530 C   VAL  222 1616    1876    2471   -269  -349 -324
ATOM   1531 O   VAL  222 15.512  24.934  53.716 1.000 17.84
ANISOU 1531 O   VAL  222 1658    1730    3390   -108  -194 4  8
ATOM   1532 CB  VAL  222 12.822  26.433  52.747 1.000 19.60
ANISOU 1532 CB  VAL  222 2267    2202    2979   91 -666  -304
ATOM   1533 CG1 VAL  222 13.781  26.363  51.563 1.000 21.96
ANISOU 1533 CG1 VAL  222 2252    3113    2977   250   -645 -182
ATOM   1534 CG2 VAL  222 11.730  25.411  52.490 1.000 22.44
ANISOU 1534 CG2 VAL  222 2923    2537    3067   -497  -898 4  4
ATOM   1535 N   LEU  223 13.789  23.892  54.621 1.000 16.30
ANISOU 1535 N   LEU  223 1792    1694    2706   -239  -93  -532
ATOM   1536 CA  LEU  223 14.407  22.575  54.579 1.000 15.91
ANISOU 1536 CA  LEU  223 1679    1864    2503   -93   -297 -333
ATOM   1537 C   LEU  223 14.114  21.908  53.243 1.000 14.86
ANISOU 1537 C   LEU  223 1337    1537    2773   -141  -322 -458
ATOM   1538 O   LEU  223 12.969  21.888  52.766 1.000 16.23
ANISOU 1538 O   LEU  223 1317    2132    2719   70 -391  -281
ATOM   1539 CB  LEU  223 13.829  21.779  55.761 1.000 19.97
ANISOU 1539 CB  LEU  223 2740    1945    2901   -121  205  -212
ATOM   1540 CG  LEU  223 14.298  20.348  55.882 1.000 23.01
ANISOU 1540 CG  LEU  223 2668    1871    4205   -375  -170 9  1
ATOM   1541 CD1 LEU  223 15.797  20.322  56.143 1.000 23.73
ANISOU 1541 CD1 LEU  223 2570    3067    3378   69 135 3 16
ATOM   1542 CD2 LEU  223 13.492  19.668  56.979 1.000 35.71
ANISOU 1542 CD2 LEU  223 2813    3296    7459   525   1116 2333
ATOM   1543 N   VAL  224 15.115  21.370  52.570 1.000 14.18
ANISOU 1543 N   VAL  224 1383    1446    2560   -28   -320 -205
ATOM   1544 CA  VAL  224 14.956  20.627  51.330 1.000 14.52
ANISOU 1544 CA  VAL  224 1585    1501    2431   -23   -323 -127
ATOM   1545 C   VAL  224 15.320  19.160  51.561 1.000 13.59
ANISOU 1545 C   VAL  224 1464    1522    2178   23 -290  -251
ATOM   1546 O   VAL  224 16.442  18.861  51.981 1.000 15.38
ANISOU 1546 O   VAL  224 1464    1558    2822   0  -505  -374
ATOM   1547 CB  VAL  224 15.832  21.209  50.222 1.000 14.25
ANISOU 1547 CB  VAL  224 1402    1606    2407   -60   -461 -108
ATOM   1548 CG1 VAL  224 15.685  20.443  48.906 1.000 16.63
ANISOU 1548 CG1 VAL  224 1682    2164    2474   -159  -408 -421
ATOM   1549 CG2 VAL  224 15.575  22.687  50.040 1.000 16.40
ANISOU 1549 CG2 VAL  224 1807    1562    2863   6  -509  8 7
ATOM   1550 N   PHE  225 14.340  18.299  51.299 1.000 13.49
ANISOU 1550 N   PHE  225 1494    1526    2106   -66   -353 -130
ATOM   1551 CA  PHE  225 14.647  16.882  51.162 1.000 14.67
ANISOU 1551 CA  PHE  225 1639    1505    2431   -115  -61  -283
ATOM   1552 C   PHE  225 14.756  16.533  49.675 1.000 14.27
ANISOU 1552 C   PHE  225 1536    1533    2352   100   -260 -194
ATOM   1553 O   PHE  225 13.858  16.876  48.893 1.000 16.25
ANISOU 1553 O   PHE  225 1604    2000    2569   296   -311 - 8 8
ATOM   1554 CB  PHE  225 13.537  15.999  51.749 1.000 15.57
ANISOU 1554 CB  PHE  225 1613    1563    2740   -25   -46  2  4
ATOM   1555 CG  PHE  225 13.387  15.996  53.257 1.000 17.95
ANISOU 1555 CG  PHE  225 1888    2267    2666   -650  -302 2 03
ATOM   1556 CD1 PHE  225 14.409  15.809  54.157 1.000 27.39
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ANISOU 1556 CD1 PHE  225 2740    4234    3431    -910  -1094  900
ATOM   1557 CD2 PHE  225 12.125  15.863  53.820  1.000 21.09
ANISOU 1557 CD2 PHE  225 2333    2765    2917    -166   399  -527
ATOM   1558 CE1 PHE  225 14.211  15.673  55.521  1.000 26.82
ANISOU 1558 CE1 PHE  225 3108    3657    3424   -1044 -1241 1128
ATOM   1559 CE2 PHE  225 11.910  15.910  55.186  1.000 21.65
ANISOU 1559 CE2 PHE  225 2994    2414    2817    623   239  -39
ATOM   1560 CZ  PHE  225 12.958  15.787  56.078  1.000 28.82
ANISOU 1560 CZ  PHE  225 3705    3716    3531    -832  -663  340
ATOM   1561 N   CYS  226 15.795  15.817  49.266  1.000 12.77
ANISOU 1561 N   CYS  226 1428    1292    2131    -60   -370 -239
ATOM   1562 CA  CYS  226 15.810  15.180  47.956  1.000 12.99
ANISOU 1562 CA  CYS  226 1360    1440    2135    12  -355  -207
ATOM   1563 C   CYS  226 14.903  13.956  47.985  1.000 12.37
ANISOU 1563 C   CYS  226 1533    1212    1955    8   -283  -311
ATOM   1564 O   CYS  226 14.961  13.217  48.974  1.000 15.68
ANISOU 1564 O   CYS  226 1885    1651    2424   -140  -611  158
ATOM   1565 CB  CYS  226 17.228  14.855  47.527  1.000 13.77
ANISOU 1565 CB  CYS  226 1410    1627    2193    19  -203   -75
ATOM   1566 SG  CYS  226 18.224  16.367  47.314  1.000 16.37
ANISOU 1566 SG  CYS  226 1744    1740    2735   -222  -236  -12
ATOM   1567 N   GLY  227 14.150  13.722  46.928  1.000 13.20
ANISOU 1567 N   GLY  227 1388    1513    2113   -28   -293 -290
ATOM   1568 CA  GLY  227 13.352  12.496  46.899  1.000 12.58
ANISOU 1568 CA  GLY  227 1279    1631    1872   -83   -438 -255
ATOM   1569 C   GLY  227 13.903  11.541  45.849  1.000 12.54
ANISOU 1569 C   GLY  227 1518    1279    1965    15  -288   -79
ATOM   1570 O   GLY  227 14.917  11.732  45.152  1.000 13.58
ANISOU 1570 O   GLY  227 1630    1523    2008    51  -155    82
ATOM   1571 N   ALA  228 13.212  10.400  45.712  1.000 13.02
ANISOU 1571 N   ALA  228 1490    1306    2151    59  -204  -161
ATOM   1572 CA  ALA  228 13.663  9.321   44.860  1.000 12.41
ANISOU 1572 CA  ALA  228 1649    1155    1912   -68   -119  -63
ATOM   1573 C   ALA  228 13.706  9.727   43.404  1.000 12.82
ANISOU 1573 C   ALA  228 1566    1288    2016    97  -223   -5
ATOM   1574 O   ALA  228 14.482  9.132   42.651  1.000 13.64
ANISOU 1574 O   ALA  228 1717    1462    2004    26  -6  -131
ATOM   1575 CB  ALA  228 12.714  8.121   45.058  1.000 14.56
ANISOU 1575 CB  ALA  228 1808    1366    2356   -219   358  -243
ATOM   1576 N   ILE  229 12.909  10.695  42.952  1.000 13.61
ANISOU 1576 N   ILE  229 1340    1391    2441   -43   -289  273
ATOM   1577 CA  ILE  229 13.024  11.131  41.566  1.000 12.93
ANISOU 1577 CA  ILE  229 1325    1243    2344   -42   -306  173
ATOM   1578 C   ILE  229 14.342  11.864  41.358  1.000 13.17
ANISOU 1578 C   ILE  229 1327    1364    2311   -47   -191  130
ATOM   1579 O   ILE  229 14.938  11.746  40.262  1.000 14.41
ANISOU 1579 O   ILE  229 1587    1596    2293   -37   -167  183
ATOM   1580 CB  ILE  229 11.768  11.888  41.103  1.000 13.46
ANISOU 1580 CB  ILE  229 1470    1631    2015   171   -354  -42
ATOM   1581 CG1 ILE  229 10.599  10.920  40.973  1.000 15.72
ANISOU 1581 CG1 ILE  229 1218    1936    2817    85   31  118
ATOM   1582 CG2 ILE  229 12.040  12.674  39.808  1.000 14.19
ANISOU 1582 CG2 ILE  229 1670    1425    2298    76  -364  174
ATOM   1583 CD1 ILE  229 10.745  9.924   39.836  1.000 20.03
ANISOU 1583 CD1 ILE  229 2129    1814    3667   -208  -385 -488
ATOM   1584 N   ALA  230 14.877  12.575  42.353  1.000 13.38
ANISOU 1584 N   ALA  230 1252    1378    2454   -97   -176  74
ATOM   1585 CA  ALA  230 16.209  13.185  42.130  1.000 12.30
ANISOU 1585 CA  ALA  230 1156    1444    2074    66  -97  -108
ATOM   1586 C   ALA  230 17.223  12.033  41.976  1.000 12.89
ANISOU 1586 C   ALA  230 1491    1327    2079   128   -30  -20
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ATOM   1587 O   ALA 230 18.100 12.091 41.146 1.000 13.65
ANISOU 1587 O   ALA 230 1240  1530  2418  108   4   4 6
ATOM   1588 CB  ALA 230 16.588 14.000 43.345 1.000 13.66
ANISOU 1588 CB  ALA 230 1559  1415  2215  -186 -21  -229
ATOM   1589 N   THR 231 17.143 10.978 42.805 1.000 13.31
ANISOU 1589 N   THR 231 1526  1318  2214  58 -261  - 1
ATOM   1590 CA  THR 231 18.022 9.815  42.659 1.000 13.32
ANISOU 1590 CA  THR 231 1660  1307  2093  78 -302  3 2
ATOM   1591 C   THR 231 17.906 9.224  41.251 1.000 13.27
ANISOU 1591 C   THR 231 1300  1631  2111  205   -211 3
ATOM   1592 O   THR 231 18.932 8.974  40.620 1.000 15.51
ANISOU 1592 O   THR 231 1468  1759  2667  245   58 -170
ATOM   1593 CB  THR 231 17.656 8.751  43.688 1.000 13.03
ANISOU 1593 CB  THR 231 1500  1302  2151  46 -166  1 2
ATOM   1594 OG1 THR 231 17.530 9.313  44.995 1.000 14.70
ANISOU 1594 OG1 THR 231 1742  1614  2230  -99   32 - 1 4
ATOM   1595 CG2 THR 231 18.698 7.621  43.697 1.000 13.69
ANISOU 1595 CG2 THR 231 1449  1419  2335  113   -211 1 9 7
ATOM   1596 N   LEU 232 16.665 9.049  40.796 1.000 13.43
ANISOU 1596 N   LEU 232 1447  1384  2271  75 -404  - 2 7
ATOM   1597 CA  LEU 232 16.446 8.396  39.527 1.000 14.11
ANISOU 1597 CA  LEU 232 1809  1226  2326  80 -468  4 9
ATOM   1598 C   LEU 232 16.975 9.248  38.381 1.000 15.53
ANISOU 1598 C   LEU 232 1968  1557  2376  209   -3 9 0
ATOM   1599 O   LEU 232 17.749 8.808  37.504 1.000 17.16
ANISOU 1599 O   LEU 232 2024  1949  2546  107   -116 - 5 1 9
ATOM   1600 CB  LEU 232 14.940 8.135  39.368 1.000 14.47
ANISOU 1600 CB  LEU 232 1692  1630  2175  72 -396  - 1 6 1
ATOM   1601 CG  LEU 232 14.525 7.307  38.155 1.000 15.89
ANISOU 1601 CG  LEU 232 1941  1768  2329  120   -470 - 3 0 3
ATOM   1602 CD1 LEU 232 15.118 5.920  38.202 1.000 23.19
ANISOU 1602 CD1 LEU 232 3565  2020  3228  743   -1110  - 8 5 1
ATOM   1603 CD2 LEU 232 13.003 7.190  38.126 1.000 19.46
ANISOU 1603 CD2 LEU 232 2006  2262  3126  -470  -523 - 6 6
ATOM   1604 N   VAL 233 16.539 10.514 38.299 1.000 13.73
ANISOU 1604 N   VAL 233 1736  1454  2025  -7 -263  1 9 3
ATOM   1605 CA  VAL 233 16.893 11.317 37.117 1.000 13.84
ANISOU 1605 CA  VAL 233 1674  1658  1926  141   -73  1 0 7
ATOM   1606 C   VAL 233 18.407 11.510 37.025 1.000 14.08
ANISOU 1606 C   VAL 233 1716  1674  1958  72 -46 1 1 3
ATOM   1607 O   VAL 233 18.940 11.587 35.910 1.000 16.65
ANISOU 1607 O   VAL 233 1923  2325  2079  38 109 4 0 1
ATOM   1608 CB  VAL 233 16.098 12.626 37.062 1.000 14.69
ANISOU 1608 CB  VAL 233 1680  1696  2206  141   -165 3 3 3
ATOM   1609 CG1 VAL 233 16.529 13.650 38.113 1.000 15.70
ANISOU 1609 CG1 VAL 233 1615  1654  2698  34 156 - 2 8
ATOM   1610 CG2 VAL 233 16.117 13.206 35.647 1.000 16.43
ANISOU 1610 CG2 VAL 233 1740  2041  2459  251   117  5 9 6
ATOM   1611 N   THR 234 19.100 11.594 38.175 1.000 14.23
ANISOU 1611 N   THR 234 1599  1724  2083  146   -110 2 3 5
ATOM   1612 CA  THR 234 20.524 11.908 38.148 1.000 16.14
ANISOU 1612 CA  THR 234 1664  1868  2602  63 -171  - 4 9
ATOM   1613 C   THR 234 21.346 10.621 38.006 1.000 17.09
ANISOU 1613 C   THR 234 1717  1865  2912  146   211  - 5 1
ATOM   1614 O   THR 234 22.558 10.644 38.139 1.000 17.25
ANISOU 1614 O   THR 234 1776  1951  2828  108   200  2 2 9
ATOM   1615 CB  THR 234 21.030 12.681 39.373 1.000 15.29
ANISOU 1615 CB  THR 234 1667  1502  2642  -46   -149 1 6 3
ATOM   1616 OG1 THR 234 20.849 11.819 40.522 1.000 15.45
ANISOU 1616 OG1 THR 234 1659  1708  2502  -80   59 4 4
ATOM   1617 CG2 THR 234 20.291 13.978 39.597 1.000 16.61
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ANISOU 1617 CG2 THR  234 1564    1672    3077    3   -34 -42
ATOM   1618 N   GLY  235 20.712  9.441  37.833 1.000 16.80
ANISOU 1618 N   GLY  235 1905    1914    2564    193   29 -219
ATOM   1619 CA  GLY  235 21.484  8.209  37.792 1.000 17.10
ANISOU 1619 CA  GLY  235 2049    1861    2586    133   223 -488
ATOM   1620 C   GLY  235 22.225  7.931  39.083 1.000 18.06
ANISOU 1620 C   GLY  235 2046    2049    2768    419   499  303
ATOM   1621 O   GLY  235 23.285  7.289  39.010 1.000 21.26
ANISOU 1621 O   GLY  235 2167    2606    3303    679   343  -74
ATOM   1622 N   GLY  236 21.602  8.149  40.237 1.000 16.17
ANISOU 1622 N   GLY  236 1663    1901    2582    36 291 305
ATOM   1623 CA  GLY  236 22.080  7.673  41.520 1.000 17.27
ANISOU 1623 CA  GLY  236 2135    1671    2754    225   28 229
ATOM   1624 C   GLY  236 23.033  8.639  42.194 1.000 16.88
ANISOU 1624 C   GLY  236 1880    1890    2644    204   100  222
ATOM   1625 O   GLY  236 23.692  9.272  43.193 1.000 19.42
ANISOU 1625 O   GLY  236 2165    2399    2814    314   -90  419
ATOM   1626 N   GLN  237 23.134  9.890  41.746 1.000 16.99
ANISOU 1626 N   GLN  237 1647    1851    2957    213   -213 167
ATOM   1627 CA  GLN  237 24.074 10.849  42.298 1.000 16.75
ANISOU 1627 CA  GLN  237 1608    2004    2752    72 177 98
ATOM   1628 C   GLN  237 23.481 11.604  43.483 1.000 16.64
ANISOU 1628 C   GLN  237 1404    2136    2402    231   -146 200
ATOM   1629 O   GLN  237 24.183 12.382  44.164 1.000 18.17
ANISOU 1629 O   GLN  237 1581    2508    2817   -227   -6 -46
ATOM   1630 CB  GLN  237 24.456 11.855  41.217 1.000 17.17
ANISOU 1630 CB  GLN  237 1912    2080    2532    71 141  -7
ATOM   1631 CG  GLN  237 25.304 11.221  40.115 1.000 17.64
ANISOU 1631 CG  GLN  237 1850    2410    2441    226   95 -30
ATOM   1632 CD  GLN  237 25.721 12.302  39.137 1.000 19.72
ANISOU 1632 CD  GLN  237 1680    2833    2979    104   317  307
ATOM   1633 OE1 GLN  237 26.602 13.110  39.436 1.000 24.27
ANISOU 1633 OE1 GLN  237 1841    3145    4234   -213  -187 809
ATOM   1634 NE2 GLN  237 24.986 12.399  38.027 1.000 18.53
ANISOU 1634 NE2 GLN  237 2007    2298    2735    432   374  202
ATOM   1635 N   VAL  238 22.221 11.359  43.807 1.000 14.75
ANISOU 1635 N   VAL  238 1563    1804    2237   -32   -54   43
ATOM   1636 CA  VAL  238 21.533 12.075  44.862 1.000 14.41
ANISOU 1636 CA  VAL  238 1535    1553    2388    0  -443 2
ATOM   1637 C   VAL  238 20.861 11.060  45.781 1.000 13.56
ANISOU 1637 C   VAL  238 1414    1392    2346    82 55 -149
ATOM   1638 O   VAL  238 20.136 10.174  45.302 1.000 15.87
ANISOU 1638 O   VAL  238 1655    1639    2737   -218  -285 -22
ATOM   1639 CB  VAL  238 20.467 13.061  44.309 1.000 14.73
ANISOU 1639 CB  VAL  238 1817    1626    2152    35 -437  -95
ATOM   1640 CG1 VAL  238 19.805 13.764  45.489 1.000 15.70
ANISOU 1640 CG1 VAL  238 1965    1490    2510    174   -524 -423
ATOM   1641 CG2 VAL  238 21.064 13.994  43.280 1.000 16.82
ANISOU 1641 CG2 VAL  238 1862    1718    2812    -60   -378 222
ATOM   1642 N   LYS  239 21.119 11.153  47.071 1.000 14.47
ANISOU 1642 N   LYS  239 1704    1474    2318    14 -40 12
ATOM   1643 CA  LYS  239 20.470 10.360  48.104 1.000 14.43
ANISOU 1643 CA  LYS  239 1460    1617    2406    106   -168 179
ATOM   1644 C   LYS  239 19.048 10.852  48.409 1.000 14.82
ANISOU 1644 C   LYS  239 1533    1456    2642    102   -53  232
ATOM   1645 O   LYS  239 18.839 12.067  48.457 1.000 14.74
ANISOU 1645 O   LYS  239 1841    1442    2318    158   -275 190
ATOM   1646 CB  LYS  239 21.320 10.435  49.385 1.000 16.40
ANISOU 1646 CB  LYS  239 1995    1712    2527    243   -543 252
ATOM   1647 CG  LYS  239 20.767  9.549  50.498 1.000 16.65
ANISOU 1647 CG  LYS  239 1954    1759    2614    -58   -781 244
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ATOM   1648 CD  LYS   239 21.738  9.511   51.683 1.000 19.76
ANISOU 1648 CD  LYS   239 2954   1820    2732   -123  -1234  363
ATOM   1649 CE  LYS   239 21.107  8.835   52.896 1.000 22.58
ANISOU 1649 CE  LYS   239 3331   2164    3086   -652  -1502  863
ATOM   1650 NZ  LYS   239 21.904  8.883   54.145 1.000 23.13
ANISOU 1650 NZ  LYS   239 2817   3360    2612   -471  -943 287
ATOM   1651 N   ALA   240 18.140  9.892   48.659 1.000 14.35
ANISOU 1651 N   ALA   240 1429   1607    2418   -156  -334 - 61
ATOM   1652 CA  ALA   240 16.791  10.192  49.145 1.000 13.98
ANISOU 1652 CA  ALA   240 1468   1635    2210   -151  -335 - 10
ATOM   1653 C   ALA   240 16.728  9.776   50.605 1.000 13.44
ANISOU 1653 C   ALA   240 1439   1388    2279   77 -450  2 2
ATOM   1654 O   ALA   240 16.514  8.592   50.913 1.000 16.32
ANISOU 1654 O   ALA   240 1932   1567    2699   -215  -673 3 14
ATOM   1655 CB  ALA   240 15.712  9.565   48.268 1.000 15.21
ANISOU 1655 CB  ALA   240 1510   1962    2306   -104  -387 - 307
ATOM   1656 N   PRO   241 16.907  10.701  51.546 1.000 14.23
ANISOU 1656 N   PRO   241 1634   1551    2221   -87   -292 7 1
ATOM   1657 CA  PRO   241 17.035  10.251  52.940 1.000 14.68
ANISOU 1657 CA  PRO   241 1718   1681    2180   -350  -174 - 30
ATOM   1658 C   PRO   241 15.693  9.961   53.579 1.000 13.89
ANISOU 1658 C   PRO   241 1659   1581    2039   -107  -207 - 74
ATOM   1659 O   PRO   241 14.629  10.527  53.261 1.000 17.06
ANISOU 1659 O   PRO   241 1698   1946    2838   17 -254  146
ATOM   1660 CB  PRO   241 17.689  11.462  53.619 1.000 16.63
ANISOU 1660 CB  PRO   241 2162   1657    2501   -460  -487 5 5
ATOM   1661 CG  PRO   241 17.138  12.651  52.826 1.000 16.56
ANISOU 1661 CG  PRO   241 2433   1601    2258   -367  -274 3 1
ATOM   1662 CD  PRO   241 17.164  12.140  51.409 1.000 14.92
ANISOU 1662 CD  PRO   241 1841   1490    2339   -215  -186 - 66
ATOM   1663 N   ARG   242 15.740  9.049   54.544 1.000 15.74
ANISOU 1663 N   ARG   242 1914   1853    2212   -381  -308 204
ATOM   1664 CA  ARG   242 14.574  8.772   55.376 1.000 15.50
ANISOU 1664 CA  ARG   242 1955   1863    2073   -236  -291 180
ATOM   1665 C   ARG   242 14.406  9.841   56.437 1.000 16.60
ANISOU 1665 C   ARG   242 1889   2011    2407   -120  -411 - 51
ATOM   1666 O   ARG   242 15.372  10.416  56.994 1.000 18.31
ANISOU 1666 O   ARG   242 2041   2186    2732   -216  -559 - 180
ATOM   1667 CB  ARG   242 14.728  7.419   56.085 1.000 18.38
ANISOU 1667 CB  ARG   242 2920   1810    2253   -486  -391 269
ATOM   1668 CG  ARG   242 14.564  6.273   55.094 1.000 18.42
ANISOU 1668 CG  ARG   242 2372   1873    2755   -88   162  - 155
ATOM   1669 CD  ARG   242 14.854  4.935   55.796 1.000 23.07
ANISOU 1669 CD  ARG   242 3380   2022    3366   470   -483 - 217
ATOM   1670 NE  ARG   242 16.334  4.954   55.991 1.000 26.69
ANISOU 1670 NE  ARG   242 3498   2727    3916   444   -829 4 7
ATOM   1671 CZ  ARG   242 16.941  3.921   56.584 1.000 27.19
ANISOU 1671 CZ  ARG   242 3166   2879    4284   -297  -1143  802
ATOM   1672 NH1 ARG   242 16.157  2.913   56.989 1.000 33.14
ANISOU 1672 NH1 ARG   242 3810   3235    5546   -316  528  726
ATOM   1673 NH2 ARG   242 18.241  3.889   56.779 1.000 31.13
ANISOU 1673 NH2 ARG   242 3043   2925    5859   227   -769 484
ATOM   1674 N   HIS   243 13.188  10.057  56.872 1.000 17.55
ANISOU 1674 N   HIS   243 1979   2233    2457   -165  -173 - 74
ATOM   1675 CA  HIS   243 12.913  11.050  57.914 1.000 17.84
ANISOU 1675 CA  HIS   243 2186   2139    2452   -260  -123 - 75
ATOM   1676 C   HIS   243 11.644  10.627  58.643 1.000 17.52
ANISOU 1676 C   HIS   243 2102   2084    2470   -248  -164 - 325
ATOM   1677 O   HIS   243 10.870  9.803   58.132 1.000 20.23
ANISOU 1677 O   HIS   243 2226   2593    2868   -551  -323 - 392
ATOM   1678 CB  HIS   243 12.865  12.456  57.324 1.000 19.74
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ANISOU 1678 CB  HIS   243 2770    2248    2482    -188   -106 8  3
ATOM   1679 CG  HIS   243 11.922  12.630  56.187  1.000  22.60
ANISOU 1679 CG  HIS   243 3449    2513    2624    164    -382 0
ATOM   1680 ND1 HIS   243 12.209  12.299  54.879  1.000  25.87
ANISOU 1680 ND1 HIS   243 4780    2575    2473    -609   -403 5  3
ATOM   1681 CD2 HIS   243 10.633  13.034  56.172  1.000  29.11
ANISOU 1681 CD2 HIS   243 3220    4490    3348    121    -421 1630
ATOM   1682 CE1 HIS   243 11.182  12.573  54.109  1.000  32.92
ANISOU 1682 CE1 HIS   243 5835    3672    3001    -1102  -1367  6 8 9
ATOM   1683 NE2 HIS   243 10.214  13.012  54.875  1.000  36.95
ANISOU 1683 NE2 HIS   243 5719    4201    4119    1019   -2016  9 8 7
ATOM   1684 N   HIS   244 11.437  11.194  59.831  1.000  18.87
ANISOU 1684 N   HIS   244 2523    2477    2171    -88    -141 - 1 1 7
ATOM   1685 CA  HIS   244 10.302  10.801  60.649  1.000  20.83
ANISOU 1685 CA  HIS   244 2802    2485    2628    171    251  2 7 2
ATOM   1686 C   HIS   244 9.927   11.968  61.551  1.000  20.33
ANISOU 1686 C   HIS   244 1803    2969    2953    -31    -78  - 2 7 3
ATOM   1687 O   HIS   244 10.482  13.073  61.510  1.000  21.71
ANISOU 1687 O   HIS   244 2057    3418    2774    -535   145  - 8 5 3
ATOM   1688 CB  HIS   244 10.714  9.557   61.468  1.000  24.38
ANISOU 1688 CB  HIS   244 4066    2644    2553    -76    -390 4 4 1
ATOM   1689 CG  HIS   244 11.859  9.725   62.423  1.000  28.34
ANISOU 1689 CG  HIS   244 4158    3498    3113    696    -727 - 8 9
ATOM   1690 ND1 HIS   244 13.132  9.205   62.268  1.000  32.35
ANISOU 1690 ND1 HIS   244 4012    4471    3808    548    -485 - 8 5 0
ATOM   1691 CD2 HIS   244 11.928  10.391  63.609  1.000  25.21
ANISOU 1691 CD2 HIS   244 2937    4137    2505    -373   45 2 1 9
ATOM   1692 CE1 HIS   244 13.887  9.531   63.312  1.000  31.71
ANISOU 1692 CE1 HIS   244 4157    4277    3613    1224   -749 - 5 1 8
ATOM   1693 NE2 HIS   244 13.146  10.263  64.150  1.000  24.52
ANISOU 1693 NE2 HIS   244 3165    3517    2633    94   -82 4 9 2
ATOM   1694 N   VAL   245 8.890   11.687  62.349  1.000  23.87
ANISOU 1694 N   VAL   245 2627    3119    3322    -251   531  - 3 1 0
ATOM   1695 CA  VAL   245 8.473   12.691  63.349  1.000  24.85
ANISOU 1695 CA  VAL   245 2785    3770    2888    481    149  - 2 9 3
ATOM   1696 C   VAL   245 8.624   12.079  64.735  1.000  26.03
ANISOU 1696 C   VAL   245 3220    3558    3112    -289   179  8  9
ATOM   1697 O   VAL   245 8.023   11.025  64.969  1.000  27.98
ANISOU 1697 O   VAL   245 3120    3085    4428    42  295  - 5 9
ATOM   1698 CB  VAL   245 7.020   13.114  63.099  1.000  26.02
ANISOU 1698 CB  VAL   245 2621    3489    3777    94  -103   - 5 6 9
ATOM   1699 CG1 VAL   245 6.586   14.114  64.161  1.000  28.06
ANISOU 1699 CG1 VAL   245 2717    3330    4614    159    746  - 4 8 5
ATOM   1700 CG2 VAL   245 6.927   13.705  61.680  1.000  30.51
ANISOU 1700 CG2 VAL   245 3564    3809    4220    1264   -305 - 3 3
ATOM   1701 N   ALA   246 9.399   12.696  65.603  1.000  28.08
ANISOU 1701 N   ALA   246 4338    3787    2543    -850   250  2 5 4
ATOM   1702 CA  ALA   246 9.567   12.316  67.003  1.000  27.45
ANISOU 1702 CA  ALA   246 4363    3360    2707    292    275  3 7 3
ATOM   1703 C   ALA   246 8.356   12.740  67.833  1.000  32.68
ANISOU 1703 C   ALA   246 4915    4473    3031    98  880 1 9 7
ATOM   1704 O   ALA   246 7.774   13.791  67.563  1.000  29.54
ANISOU 1704 O   ALA   246 3522    4283    3417    -224   875  - 3 2 9
ATOM   1705 CB  ALA   246 10.819  13.010  67.542  1.000  30.33
ANISOU 1705 CB  ALA   246 4564    3949    3011    615    -221 - 4 2 2
ATOM   1706 N   ALA   247 8.048   11.958  68.849  1.000  34.09
ANISOU 1706 N   ALA   247 4483    5156    3311    -1190  466  3 9 3
ATOM   1707 CA  ALA   247 7.036   12.190  69.859  1.000  34.23
ANISOU 1707 CA  ALA   247 4188    5627    3189    -1215  315  5 1 5
ATOM   1708 C   ALA   247 7.609   12.910  71.081  1.000  33.31
ANISOU 1708 C   ALA   247 5419    4684    2555    249    -506 1 1 4 7
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ATOM   1709 O   ALA  247  8.733  12.708  71.523 1.000 38.23
ANISOU 1709 O   ALA  247  5787    4478    4259    -378  -1519  1230
ATOM   1710 CB  ALA  247  6.383  10.881  70.314 1.000 47.11
ANISOU 1710 CB  ALA  247  8374    6726    2801   -2800  1464  686
ATOM   1711 N   PRO  248  6.817  13.851  71.577 1.000 42.28
ANISOU 1711 N   PRO  248  5771    5458    4836    -300   933   -97
ATOM   1712 CA  PRO  248  7.256  14.581  72.773 1.000 44.85
ANISOU 1712 CA  PRO  248  7568    5478    3996    -645  1413  214
ATOM   1713 C   PRO  248  7.161  13.618  73.948 1.000 49.25
ANISOU 1713 C   PRO  248  7978    5660    5075   -1446   552   985
ATOM   1714 O   PRO  248  6.251  12.794  74.014 1.000 45.48
ANISOU 1714 O   PRO  248  7651    5391    4237   -1127  2573  -796
ATOM   1715 CB  PRO  248  6.196  15.674  72.897 1.000 49.75
ANISOU 1715 CB  PRO  248  8563    4816    5523    -513  1238  -138
ATOM   1716 CG  PRO  248  4.973  15.053  72.299 1.000 50.89
ANISOU 1716 CG  PRO  248  7228    5564    6545    -108  2210 -1064
ATOM   1717 CD  PRO  248  5.489  14.272  71.114 1.000 44.69
ANISOU 1717 CD  PRO  248  6395    4579    6006    937    953   -577
ATOM   1718 N   ARG  249  8.109  13.683  74.883 1.000 48.76
ANISOU 1718 N   ARG  249  9141    6341    3045   -1317  1069  -477
ATOM   1719 CA  ARG  249  7.865  12.783  76.024 1.000 55.51
ANISOU 1719 CA  ARG  249  10023   6914    4156   -1098   895   566
ATOM   1720 C   ARG  249  6.844  13.466  76.916 1.000 46.09
ANISOU 1720 C   ARG  249  5561    8382    3568   -2484  -7  1237
ATOM   1721 O   ARG  249  6.244  12.915  77.831 1.000 56.25
ANISOU 1721 O   ARG  249  7572    6368    7433    -377  1799  3995
ATOM   1722 CB  ARG  249  9.177  12.459  76.721 1.000 55.24
ANISOU 1722 CB  ARG  249  8950    7715    4326    705   2864  1270
ATOM   1723 CG  ARG  249  9.915  11.278  76.110 1.000 71.04
ANISOU 1723 CG  ARG  249  12881   7330    6779   1135  3707  622
ATOM   1724 CD  ARG  249 10.403  10.303  77.165 1.000 72.89
ANISOU 1724 CD  ARG  249  11721   7991    7984   2171  2723  409
ATOM   1725 NE  ARG  249 11.124  9.162   76.580 1.000 70.73
ANISOU 1725 NE  ARG  249  8627    9977    8271   2362  2650  -266
ATOM   1726 CZ  ARG  249 12.039  8.493   77.282 1.000 72.71
ANISOU 1726 CZ  ARG  249  10269   9417    7942   2304  2153  133
ATOM   1727 NH1 ARG  249 12.297  8.893   78.521 1.000 89.50
ANISOU 1727 NH1 ARG  249  22286   6161    5559   2015  1622  3874
ATOM   1728 NH2 ARG  249 12.682  7.462   76.761 1.000 67.68
ANISOU 1728 NH2 ARG  249  5358    10062   10295   1004  3886  221
ATOM   1729 N   ALA  254  1.981  18.918  75.430 1.000 85.24
ANISOU 1729 N   ALA  254  15501   7922    8964   -4581 -1437  2347
ATOM   1730 CA  ALA  254  2.287  20.081  76.257 1.000 76.08
ANISOU 1730 CA  ALA  254  12510   8110    8286   -3993  1617  1592
ATOM   1731 C   ALA  254  2.943  21.216  75.489 1.000 60.91
ANISOU 1731 C   ALA  254  8383    5719    9040    -506  2886  1312
ATOM   1732 O   ALA  254  4.174  21.309  75.487 1.000 72.37
ANISOU 1732 O   ALA  254  8056    8109    11332   1602  4553  3381
ATOM   1733 CB  ALA  254  3.264  19.667  77.351 1.000 60.48
ANISOU 1733 CB  ALA  254  12589   7262    3131    -866  4570 -1112
ATOM   1734 N   GLY  255  2.200  22.108  74.846 1.000 54.40
ANISOU 1734 N   GLY  255  8029    5451    7190    594   2922  -940
ATOM   1735 CA  GLY  255  2.880  23.171  74.098 1.000 40.05
ANISOU 1735 CA  GLY  255  5181    4570    5465   1424   836   -921
ATOM   1736 C   GLY  255  3.640  22.565  72.921 1.000 38.82
ANISOU 1736 C   GLY  255  4227    4772    5749    557   702  -1561
ATOM   1737 O   GLY  255  4.580  23.163  72.398 1.000 39.96
ANISOU 1737 O   GLY  255  2978    6491    5715   -128  -136 -2226
ATOM   1738 N   SER  256  3.164  21.387  72.509 1.000 37.29
ANISOU 1738 N   SER  256  5047    4594    4527    389    11  -853
ATOM   1739 CA  SER  256  3.738  20.606  71.429 1.000 35.71
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ANISOU	1739	CA	SER	256	4737	4533	4299	560	-501	-919	
ATOM	1740	C	SER	256	2.983	20.742	70.118	1.000	34.93		
ANISOU	1740	C	SER	256	4584	4669	4019	-98	-85	91	
ATOM	1741	O	SER	256	3.251	20.000	69.162	1.000	33.92		
ANISOU	1741	O	SER	256	3575	6107	3207	503	304	377	
ATOM	1742	CB	SER	256	3.845	19.136	71.853	1.000	30.17		
ANISOU	1742	CB	SER	256	3125	4830	3509	624	212	-492	
ATOM	1743	OG	SER	256	2.688	18.752	72.601	1.000	61.15		
ANISOU	1743	OG	SER	256	2987	8497	11750	451	1943	2630	
ATOM	1744	N	SER	257	2.065	21.700	70.030	1.000	35.54		
ANISOU	1744	N	SER	257	4037	5989	3479	347	242	-86	
ATOM	1745	CA	SER	257	1.379	21.993	68.767	1.000	30.95		
ANISOU	1745	CA	SER	257	2824	5827	3109	170	672	-509	
ATOM	1746	C	SER	257	2.378	22.538	67.760	1.000	30.63		
ANISOU	1746	C	SER	257	3181	5524	2934	-476	765	-1297	
ATOM	1747	O	SER	257	3.359	23.159	68.199	1.000	34.70		
ANISOU	1747	O	SER	257	3500	6070	3616	-829	603	-1516	
ATOM	1748	CB	SER	257	0.331	23.088	69.036	1.000	38.70		
ANISOU	1748	CB	SER	257	3085	6518	5103	796	1381	435	
ATOM	1749	OG	SER	257	0.801	24.361	68.601	1.000	65.12		
ANISOU	1749	OG	SER	257	8002	5175	11565	-999	-3375	383	
ATOM	1750	N	ARG	258	2.119	22.384	66.471	1.000	30.51		
ANISOU	1750	N	ARG	258	3668	5068	2855	-332	677	-995	
ATOM	1751	CA	ARG	258	2.997	22.819	65.396	1.000	28.15		
ANISOU	1751	CA	ARG	258	3100	4620	2976	-106	358	-544	
ATOM	1752	C	ARG	258	2.198	22.913	64.096	1.000	25.64		
ANISOU	1752	C	ARG	258	3488	3381	2872	-676	273	-904	
ATOM	1753	O	ARG	258	1.132	22.294	63.981	1.000	24.93		
ANISOU	1753	O	ARG	258	3162	3240	3070	-441	478	-560	
ATOM	1754	CB	ARG	258	4.175	21.873	65.154	1.000	27.21		
ANISOU	1754	CB	ARG	258	3158	4041	3141	-446	313	-1352	
ATOM	1755	CG	ARG	258	3.861	20.508	64.570	1.000	30.90		
ANISOU	1755	CG	ARG	258	4782	3429	3531	-737	-738	-389	
ATOM	1756	CD	ARG	258	5.039	19.537	64.769	1.000	36.65		
ANISOU	1756	CD	ARG	258	5937	3466	4523	106	477	306	
ATOM	1757	NE	ARG	258	4.597	18.176	64.411	1.000	32.42		
ANISOU	1757	NE	ARG	258	3372	3858	5089	-85	-274	528	
ATOM	1758	CZ	ARG	258	4.633	17.777	63.143	1.000	37.32		
ANISOU	1758	CZ	ARG	258	5670	2958	5553	155	680	43	
ATOM	1759	NH1	ARG	258	5.075	18.622	62.217	1.000	29.98		
ANISOU	1759	NH1	ARG	258	3077	3435	4881	-150	-211	-103	
ATOM	1760	NH2	ARG	258	4.210	16.566	62.824	1.000	38.66		
ANISOU	1760	NH2	ARG	258	5812	3151	5724	-190	-1632	865	
ATOM	1761	N	THR	259	2.806	23.572	63.120	1.000	23.62		
ANISOU	1761	N	THR	259	2625	3578	2771	-519	315	-1037	
ATOM	1762	CA	THR	259	2.337	23.482	61.730	1.000	21.97		
ANISOU	1762	CA	THR	259	2614	2934	2800	-36	247	-1041	
ATOM	1763	C	THR	259	3.528	23.197	60.808	1.000	19.76		
ANISOU	1763	C	THR	259	2257	2663	2587	-38	21	-699	
ATOM	1764	O	THR	259	4.698	23.411	61.159	1.000	21.13		
ANISOU	1764	O	THR	259	2464	3096	2468	-495	-10	-286	
ATOM	1765	CB	THR	259	1.682	24.793	61.278	1.000	24.04		
ANISOU	1765	CB	THR	259	2125	3084	3927	70	-157	-1229	
ATOM	1766	OG1	THR	259	2.697	25.790	61.041	1.000	23.14		
ANISOU	1766	OG1	THR	259	2297	2848	3648	196	-142	-829	
ATOM	1767	CG2	THR	259	0.760	25.408	62.331	1.000	25.17		
ANISOU	1767	CG2	THR	259	2941	3229	3393	726	264	-136	
ATOM	1768	N	SER	260	3.234	22.706	59.600	1.000	20.41		
ANISOU	1768	N	SER	260	2386	2762	2609	-61	74	-806	
ATOM	1769	CA	SER	260	4.225	22.515	58.551	1.000	19.33		
ANISOU	1769	CA	SER	260	2488	2459	2399	192	8	-344	

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ATOM   1770 C   SER  260 3.587   22.871  57.210 1.000 18.78
ANISOU 1770 C   SER  260 1996    2544    2595   -379  -264 -311
ATOM   1771 O   SER  260 2.375   22.758  56.988 1.000 21.20
ANISOU 1771 O   SER  260 1917    2448    3689   -75   -269 -573
ATOM   1772 CB  SER  260 4.738   21.076  58.480 1.000 20.28
ANISOU 1772 CB  SER  260 2491    2458    2755   160   -101 -495
ATOM   1773 OG  SER  260 3.656   20.197  58.227 1.000 22.70
ANISOU 1773 OG  SER  260 2758    2574    3294   -113  -284 -169
ATOM   1774 N   SER  261 4.474   23.329  56.330 1.000 18.79
ANISOU 1774 N   SER  261 2189    2215    2737   -55   -92  35
ATOM   1775 CA  SER  261 4.148   23.585  54.929 1.000 16.88
ANISOU 1775 CA  SER  261 2074    1718    2622   22 -117  -404
ATOM   1776 C   SER  261 5.066   22.672  54.106 1.000 17.25
ANISOU 1776 C   SER  261 1720    1833    3000   101   -350 -491
ATOM   1777 O   SER  261 6.272   22.876  54.173 1.000 19.96
ANISOU 1777 O   SER  261 1712    2417    3456   50 -483  -781
ATOM   1778 CB  SER  261 4.471   25.028  54.503 1.000 19.95
ANISOU 1778 CB  SER  261 2903    1675    3002   164   -113 -135
ATOM   1779 OG  SER  261 4.404   25.127  53.107 1.000 35.64
ANISOU 1779 OG  SER  261 5435    4814    3293   -1089 -766 1263
ATOM   1780 N   VAL  262 4.467   21.722  53.435 1.000 15.56
ANISOU 1780 N   VAL  262 1751    2021    2140   -75   -40  -436
ATOM   1781 CA  VAL  262 5.247   20.713  52.711 1.000 15.41
ANISOU 1781 CA  VAL  262 1871    1938    2048   43 21 -196
ATOM   1782 C   VAL  262 4.914   20.874  51.242 1.000 14.05
ANISOU 1782 C   VAL  262 1460    1784    2095   -13   29 -144
ATOM   1783 O   VAL  262 3.759   20.712  50.844 1.000 15.45
ANISOU 1783 O   VAL  262 1488    1900    2481   -175  -94  -191
ATOM   1784 CB  VAL  262 4.902   19.307  53.253 1.000 16.87
ANISOU 1784 CB  VAL  262 2144    2005    2260   165   -164 2 3
ATOM   1785 CG1 VAL  262 5.567   18.275  52.364 1.000 20.01
ANISOU 1785 CG1 VAL  262 2433    2006    3165   4  -191  -637
ATOM   1786 CG2 VAL  262 5.335   19.200  54.715 1.000 18.63
ANISOU 1786 CG2 VAL  262 2390    2242    2446   147   -397 175
ATOM   1787 N   PHE  263 5.894   21.163  50.412 1.000 13.73
ANISOU 1787 N   PHE  263 1497    1573    2148   5  -64 186
ATOM   1788 CA  PHE  263 5.762   21.411  48.994 1.000 13.04
ANISOU 1788 CA  PHE  263 1654    1196    2105   -12   -193 113
ATOM   1789 C   PHE  263 6.479   20.253  48.284 1.000 13.56
ANISOU 1789 C   PHE  263 1432    1351    2370   -175  -98  -87
ATOM   1790 O   PHE  263 7.732   20.177  48.281 1.000 13.83
ANISOU 1790 O   PHE  263 1415    1437    2403   -82   -299 -104
ATOM   1791 CB  PHE  263 6.364   22.770  48.594 1.000 13.50
ANISOU 1791 CB  PHE  263 1658    1374    2098   -295  -97  34
ATOM   1792 CG  PHE  263 6.062   23.148  47.135 1.000 13.34
ANISOU 1792 CG  PHE  263 1616    1358    2096   -159  -111 8 2
ATOM   1793 CD1 PHE  263 6.750   22.635  46.051 1.000 14.95
ANISOU 1793 CD1 PHE  263 1977    1547    2156   -354  -131 -384
ATOM   1794 CD2 PHE  263 5.005   24.048  46.883 1.000 15.37
ANISOU 1794 CD2 PHE  263 1549    1557    2735   -139  -264 303
ATOM   1795 CE1 PHE  263 6.468   22.945  44.720 1.000 14.58
ANISOU 1795 CE1 PHE  263 1721    1621    2196   -242  71 -144
ATOM   1796 CE2 PHE  263 4.703   24.366  45.566 1.000 14.71
ANISOU 1796 CE2 PHE  263 1482    1428    2680   -20   -261 137
ATOM   1797 CZ  PHE  263 5.383   23.809  44.479 1.000 16.55
ANISOU 1797 CZ  PHE  263 1935    1492    2862   -152  29 1 4
ATOM   1798 N   PHE  264 5.721   19.405  47.588 1.000 12.07
ANISOU 1798 N   PHE  264 1277    1343    1967   -66   -49  1 9
ATOM   1799 CA  PHE  264 6.267   18.328  46.769 1.000 11.90
ANISOU 1799 CA  PHE  264 1177    1289    2058   -129  34 -21
ATOM   1800 C   PHE  264 6.440   18.775  45.314 1.000 11.76
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ANISOU 1800 C   PHE  264 1206   1258    2004   -121  -42   8
ATOM   1801 O   PHE  264 5.418  19.097  44.683 1.000 12.55
ANISOU 1801 O   PHE  264 1165   1473    2133   -77   -120 4  6
ATOM   1802 CB  PHE  264 5.346  17.099  46.773 1.000 12.39
ANISOU 1802 CB  PHE  264 1101   1498    2110   -304  -42   6  3
ATOM   1803 CG  PHE  264 5.022  16.558  48.150 1.000 13.97
ANISOU 1803 CG  PHE  264 1647   1465    2197   -290   13 1 2 1
ATOM   1804 CD1 PHE  264 5.960  15.848  48.852 1.000 17.07
ANISOU 1804 CD1 PHE  264 2039   1976    2471   -422  -410 4 9 7
ATOM   1805 CD2 PHE  264 3.747  16.679  48.668 1.000 17.41
ANISOU 1805 CD2 PHE  264 1835   2359    2419   -440   433  1 1 2
ATOM   1806 CE1 PHE  264 5.661  15.247  50.053 1.000 20.59
ANISOU 1806 CE1 PHE  264 2616   2710    2496   -556  -425 7 2 5
ATOM   1807 CE2 PHE  264 3.458  16.133  49.906 1.000 22.51
ANISOU 1807 CE2 PHE  264 2151   4047    2355   -787   106  5 5 3
ATOM   1808 CZ  PHE  264 4.386  15.350  50 562 1.000 20.88
ANISOU 1808 CZ  PHE  264 2889   2376    2669   --936  -22  3 0 6
ATOM   1809 N   LEU  265 7.676  18.756  44.811 1.000 11.81
ANISOU 1809 N   LEU  265 1192   1248    2047   -37    47 1 9
ATOM   1810 CA  LEU  265 7.900  19.000  43.374 1.000 12.01
ANISOU 1810 CA  LEU  265 1264   1269    2028   -223   16 - 6 3
ATOM   1811 C   LEU  265 7.915  17.617  42.703 1.000 12.10
ANISOU 1811 C   LEU  265 1266   1298    2033   -117   -81   3
ATOM   1812 O   LEU  265 8.842  16.834  42.915 1.000 12.93
ANISOU 1812 O   LEU  265 1367   1283    2260   -107  -152 4  4
ATOM   1813 CB  LEU  265 9.246  19.730  43.156 1.000 12.59
ANISOU 1813 CB  LEU  265 1399   1364    2019   -257   57 -  9
ATOM   1814 CG  LEU  265 9.500  20.124  41.709 1.000 12.19
ANISOU 1814 CG  LEU  265 1168   1399    2066   -292  -248 3 0 2
ATOM   1815 CD1 LEU  265 8.620  21.314  41.318 1.000 13.29
ANISOU 1815 CD1 LEU  265 1518   1546    1984    84 36 1  9
ATOM   1816 CD2 LEU  265 10.971 20.458  41.449 1.000 13.14
ANISOU 1816 CD2 LEU  265 1204   1593    2197   -234   41 - 2 0
ATOM   1817 N   ARG  266 6.842  17.249  41.996 1.000 12.06
ANISOU 1817 N   ARG  266 1412   1127    2043   -220  -190 4  5
ATOM   1818 CA  ARG  266 6.586  15.913  41.488 1.000 12.07
ANISOU 1818 CA  ARG  266 1372   1201    2012   -258   0   8  0
ATOM   1819 C   ARG  266 6.619  15.965  39.972 1.000 11.75
ANISOU 1819 C   ARG  266 1203   1315    1948    29 -267  1 4 2
ATOM   1820 O   ARG  266 6.032  16.860  39.396 1.000 13.06
ANISOU 1820 O   ARG  266 1430   1318    2214    5  -173   2 8 1
ATOM   1821 CB  ARG  266 5.243  15.370  41.994 1.000 12.95
ANISOU 1821 CB  ARG  266 1142   1477    2302   -189   43 - 3 3
ATOM   1822 CG  ARG  266 5.036  15.606  43.488 1.000 13.80
ANISOU 1822 CG  ARG  266 1351   1686    2207   -159   66 - 1 1 5
ATOM   1823 CD  ARG  266 3.723  15.041  43.993 1.000 12.70
ANISOU 1823 CD  ARG  266 1369   1362    2094    66 -22 8  4
ATOM   1824 NE  ARG  266 2.581  15.648  43.281 1.000 12.97
ANISOU 1824 NE  ARG  266 1343   1155    2428    52 -165  - 1 3 7
ATOM   1825 CZ  ARG  266 1.304  15.281  43.500 1.000 11.34
ANISOU 1825 CZ  ARG  266 1432   1009    1869    45 -149  - 1 0 3
ATOM   1826 NH1 ARG  266 0.995  14.414  44.476 1.000 13.39
ANISOU 1826 NH1 ARG  266 1802   1165    2119   -11   -38   7  2
ATOM   1827 NH2 ARG  266 0.305  15.821  42.826 1.000 12.55
ANISOU 1827 NH2 ARG  266 1490   1067    2210   125   -357 - 1 5 9
ATOM   1828 N   PRO  267 7.237  14.951  39.357 1.000 12.74
ANISOU 1828 N   PRO  267 1418   1394    2030    16 -146  1 0 8
ATOM   1829 CA  PRO  267 7.298  14.947  37.887 1.000 13.88
ANISOU 1829 CA  PRO  267 1442   1786    2047   167   -125 - 8 4
ATOM   1830 C   PRO  267 5.957  14.722  37.222 1.000 12.61
ANISOU 1830 C   PRO  267 1413   1508    1868   -6  44  2  7
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ATOM   1831 O   PRO  267 4.998   14.155  37.772 1.000 13.60
ANISOU 1831 O   PRO  267 1648    1355    2164   -160  118  9  3
ATOM   1832 CB  PRO  267 8.238   13.761  37.599 1.000 15.30
ANISOU 1832 CB  PRO  267 1435    1740    2637   115   -28  -169
ATOM   1833 CG  PRO  267 8.033   12.846  38.764 1.000 15.82
ANISOU 1833 CG  PRO  267 1885    1804    2324   381   -270 -197
ATOM   1834 CD  PRO  267 7.872   13.746  39.965 1.000 14.73
ANISOU 1834 CD  PRO  267 1803    1356    2438   311   -666 -205
ATOM   1835 N   ASN  268 5.933   15.051  35.939 1.000 13.27
ANISOU 1835 N   ASN  268 1601    1665    1777   -126  -43  -127
ATOM   1836 CA  ASN  268 4.800   14.709  35.073 1.000 13.72
ANISOU 1836 CA  ASN  268 1793    1401    2018   -214  -236 -71
ATOM   1837 C   ASN  268 4.723   13.192  34.875 1.000 13.14
ANISOU 1837 C   ASN  268 1485    1350    2156   -213  104  5  4
ATOM   1838 O   ASN  268 5.702   12.467  34.934 1.000 13.90
ANISOU 1838 O   ASN  268 1698    1416    2167   -91   123  -36
ATOM   1839 CB  ASN  268 4.997   15.338  33.690 1.000 15.74
ANISOU 1839 CB  ASN  268 2597    1369    2016   -66   -437 135
ATOM   1840 CG  ASN  268 5.011   16.862  33.811 1.000 15.41
ANISOU 1840 CG  ASN  268 2255    1439    2162   -17   -184 4  7
ATOM   1841 OD1 ASN  268 4.069   17.454  34.352 1.000 17.75
ANISOU 1841 OD1 ASN  268 2573    1686    2487   42  91  -98
ATOM   1842 ND2 ASN  268 6.066   17.503  33.319 1.000 16.61
ANISOU 1842 ND2 ASN  268 2408    1355    2546   -50   -57  142
ATOM   1843 N   ALA  269 3.531   12.712  34.594 1.000 13.99
ANISOU 1843 N   ALA  269 1677    1467    2172   -356  -65  170
ATOM   1844 CA  ALA  269 3.278   11.286  34.353 1.000 13.42
ANISOU 1844 CA  ALA  269 1459    1405    2234   -208  -118 107
ATOM   1845 C   ALA  269 4.182   10.729  33.252 1.000 13.93
ANISOU 1845 C   ALA  269 1289    1538    2466   -168  -5  153
ATOM   1846 O   ALA  269 4.581   9.550   33.318 1.000 14.97
ANISOU 1846 O   ALA  269 1718    1476    2494   -143  112  8  6
ATOM   1847 CB  ALA  269 1.806   11.051  34.008 1.000 13.76
ANISOU 1847 CB  ALA  269 1300    1474    2454   -60   -61  123
ATOM   1848 N   ASP  270 4.482   11.541  32.251 1.000 14.38
ANISOU 1848 N   ASP  270 1688    1476    2300   -151  30  -5
ATOM   1849 CA  ASP  270 5.247   11.079  31.098 1.000 14.83
ANISOU 1849 CA  ASP  270 1747    1693    2194   -99   -42  6  8
ATOM   1850 C   ASP  270 6.749   11.287  31.227 1.000 15.68
ANISOU 1850 C   ASP  270 1714    1886    2357   -224  143  8  6
ATOM   1851 O   ASP  270 7.483   11.008  30.255 1.000 17.12
ANISOU 1851 O   ASP  270 1952    2354    2200   -80   139  226
ATOM   1852 CB  ASP  270 4.718   11.681  29.800 1.000 17.67
ANISOU 1852 CB  ASP  270 2461    1966    2288   -75   -319 126
ATOM   1853 CG  ASP  270 4.968   13.168  29.649 1.000 18.22
ANISOU 1853 CG  ASP  270 2284    2024    2613   -88   -80  474
ATOM   1854 OD1 ASP  270 5.386   13.826  30.607 1.000 20.55
ANISOU 1854 OD1 ASP  270 3424    1541    2844   -47   -287 425
ATOM   1855 OD2 ASP  270 4.646   13.698  28.552 1.000 23.06
ANISOU 1855 OD2 ASP  270 3317    2727    2719   -49   -136 812
ATOM   1856 N   PHE  271 7.221   11.668  32.413 1.000 13.93
ANISOU 1856 N   PHE  271 1556    1318    2417   97  31  4  1
ATOM   1857 CA  PHE  271 8.671   11.723  32.644 1.000 14.41
ANISOU 1857 CA  PHE  271 1624    1430    2423   110   29  263
ATOM   1858 C   PHE  271 9.275   10.349  32.325 1.000 13.31
ANISOU 1858 C   PHE  271 1402    1430    2225   -30   28  218
ATOM   1859 O   PHE  271 8.790   9.340   32.870 1.000 14.91
ANISOU 1859 O   PHE  271 1900    1374    2392   -26   240  192
ATOM   1860 CB  PHE  271 8.942   12.146  34.098 1.000 15.57
ANISOU 1860 CB  PHE  271 1700    1721    2495   -66   -36  9
ATOM   1861 CG  PHE  271 10.386  11.791  34.516 1.000 14.56
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ANISOU 1861 CG  PHE  271 1729    1320    2485    -152  34 -124
ATOM   1862 CD1 PHE  271 11.460  12.369  33.814 1.000 17.76
ANISOU 1862 CD1 PHE  271 1714    1581    3452    -235  393 -249
ATOM   1863 CD2 PHE  271 10.698  10.972  35.570 1.000 18.04
ANISOU 1863 CD2 PHE  271 2182    1543    3130    -95   -540 172
ATOM   1864 CE1 PHE  271 12.786  12.092  34.166 1.000 17.54
ANISOU 1864 CE1 PHE  271 1838    1700    3128    -291  114  -50
ATOM   1865 CE2 PHE  271 11.997  10.609  35.899 1.000 18.84
ANISOU 1865 CE2 PHE  271 1935    1646    3578    -392  -396 425
ATOM   1866 CZ  PHE  271 13.039  11.154  35.162 1.000 17.25
ANISOU 1866 CZ  PHE  271 2444    1697    2415    -486  -19  -394
ATOM   1867 N   THR  272 10.278  10.298  31.453 1.000 13.78
ANISOU 1867 N   THR  272 1514    1641    2083    30 19 154
ATOM   1868 CA  THR  272 10.811  9.046   30.938 1.000 13.99
ANISOU 1868 CA  THR  272 1551    1660    2105    -99   83 67
ATOM   1869 C   THR  272 12.246  8.841   31.410 1.000 14.71
ANISOU 1869 C   THR  272 1598    1549    2441    -3 108 357
ATOM   1870 O   THR  272 13.046  9.808   31.424 1.000 16.23
ANISOU 1870 O   THR  272 1646    1742    2780    -246  5  185
ATOM   1871 CB  THR  272 10.751  9.117   29.388 1.000 16.27
ANISOU 1871 CB  THR  272 1856    2205    2119    191   125  8
ATOM   1872 OG1 THR  272 9.341   9.221   29.032 1.000 17.99
ANISOU 1872 OG1 THR  272 1996    2473    2368    64 -190  264
ATOM   1873 CG2 THR  272 11.249  7.856   28.723 1.000 17.94
ANISOU 1873 CG2 THR  272 2423    2167    2227    173   177  -94
ATOM   1874 N   PHE  273 12.567  7.600   31.743 1.000 14.91
ANISOU 1874 N   PHE  273 1644    1521    2499    92 238 218
ATOM   1875 CA  PHE  273 13.894  7.253   32.254 1.000 15.16
ANISOU 1875 CA  PHE  273 1602    1813    2345    296  277  55
ATOM   1876 C   PHE  273 14.350  5.899   31.724 1.000 14.69
ANISOU 1876 C   PHE  273 1408    1647    2528    24 479 178
ATOM   1877 O   PHE  273 13.541  5.086   31.262 1.000 15.91
ANISOU 1877 O   PHE  273 1738    1767    2541    -115  450  119
ATOM   1878 CB  PHE  273 13.899  7.301   33.769 1.000 15.77
ANISOU 1878 CB  PHE  273 1758    1921    2314    -344  286  123
ATOM   1879 CG  PHE  273 12.931  6.336   34.424 1.000 14.54
ANISOU 1879 CG  PHE  273 1390    1726    2410    -95   -11  195
ATOM   1880 CD1 PHE  273 11.601  6.743   34.655 1.000 16.64
ANISOU 1880 CD1 PHE  273 1457    2343    2521    -24   308  362
ATOM   1881 CD2 PHE  273 13.295  5.038   34.721 1.000 15.23
ANISOU 1881 CD2 PHE  273 1863    1624    2300    -110  91 136
ATOM   1882 CE1 PHE  273 10.719  5.848   35.259 1.000 16.10
ANISOU 1882 CE1 PHE  273 1593    2158    2365    -162  292  122
ATOM   1883 CE2 PHE  273 12.419  4.148   35.354 1.000 16.01
ANISOU 1883 CE2 PHE  273 1904    1980    2198    -139  285  181
ATOM   1884 CZ  PHE  273 11.109  4.559   35.548 1.000 15.18
ANISOU 1884 CZ  PHE  273 1843    2001    1925    -141  73 -227
ATOM   1885 N   SER  274 15.634  5.612   31.926 1.000 15.31
ANISOU 1885 N   SER  274 1559    1940    2317    361   383  247
ATOM   1886 CA  SER  274 16.221  4.318   31.518 1.000 15.37
ANISOU 1886 CA  SER  274 1476    1723    2642    32 557 156
ATOM   1887 C   SER  274 15.953  3.284   32.588 1.000 14.67
ANISOU 1887 C   SER  274 973 1877    2726    -113  265 302
ATOM   1888 O   SER  274 16.310  3.476   33.770 1.000 15.98
ANISOU 1888 O   SER  274 1668    1677    2728    126   143  193
ATOM   1889 CB  SER  274 17.742  4.556   31.356 1.000 17.41
ANISOU 1889 CB  SER  274 1487    2019    3112    235   945  725
ATOM   1890 OG  SER  274 18.362  3.280   31.334 1.000 18.03
ANISOU 1890 OG  SER  274 1839    1961    3052    293   840  188
ATOM   1891 N   VAL  275 15.395  2.133   32.182 1.000 15.58
ANISOU 1891 N   VAL  275 1646    1857    2417    -182  461  261
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ATOM   1892 CA  VAL  275 15.158  1.033   33.137 1.000 15.65
ANISOU 1892 CA  VAL  275 1681    1800    2466   -180  261  265
ATOM   1893 C   VAL  275 16.454  0.445   33.659 1.000 15.33
ANISOU 1893 C   VAL  275 1805    1881    2139   116   392  -45
ATOM   1894 O   VAL  275 16.623  0.280   34.871 1.000 15.68
ANISOU 1894 O   VAL  275 2037    1655    2267   6  297 196
ATOM   1895 CB  VAL  275 14.227 -0.004  32.483 1.000 16.05
ANISOU 1895 CB  VAL  275 1635    1708    2755   -76   405  2 1
ATOM   1896 CG1 VAL  275 14.080 -1.186  33.426 1.000 17.04
ANISOU 1896 CG1 VAL  275 2045    1688    2740   -211  230  1 5
ATOM   1897 CG2 VAL  275 12.847  0.608   32.203 1.000 18.45
ANISOU 1897 CG2 VAL  275 1650    2432    2928   -57   135  269
ATOM   1898 N   PRO  276 17.437  0.093   32.844 1.000 16.21
ANISOU 1898 N   PRO  276 1927    1700    2532   97 589 3 6
ATOM   1899 CA  PRO  276 18.707 -0.434  33.399 1.000 18.10
ANISOU 1899 CA  PRO  276 1736    2115    3025   147   616  -93
ATOM   1900 C   PRO  276 19.382  0.541   34.321 1.000 17.52
ANISOU 1900 C   PRO  276 1998    1961    2697   97 469 239
ATOM   1901 O   PRO  276 19.963  0.171   35.348 1.000 19.66
ANISOU 1901 O   PRO  276 2015    2409    3047   24 280 468
ATOM   1902 CB  PRO  276 19.590 -0.796  32.214 1.000 20.80
ANISOU 1902 CB  PRO  276 2094    2687    3121   306   771  -249
ATOM   1903 CG  PRO  276 18.852 -0.390  30.999 1.000 21.57
ANISOU 1903 CG  PRO  276 2051    3098    3046   340   802  -288
ATOM   1904 CD  PRO  276 17.446 -0.021  31.368 1.000 18.17
ANISOU 1904 CD  PRO  276 2053    2306    2546   179   832  -318
ATOM   1905 N   LEU  277 19.325  1.845   34.027 1.000 17.09
ANISOU 1905 N   LEU  277 1571    1898    3025   230   511  107
ATOM   1906 CA  LEU  277 19.962  2.802   34.940 1.000 19.34
ANISOU 1906 CA  LEU  277 2035    2141    3171   -219  218  262
ATOM   1907 C   LEU  277 19.214  2.858   36.249 1.000 18.34
ANISOU 1907 C   LEU  277 1963    1958    3049   -33   -3  -38
ATOM   1908 O   LEU  277 19.815  2.957   37.319 1.000 19.29
ANISOU 1908 O   LEU  277 2466    1710    3154   -271  -188  - 2
ATOM   1909 CB  LEU  277 20.094  4.178   34.291 1.000 21.41
ANISOU 1909 CB  LEU  277 2739    2011    3383   14 12 287
ATOM   1910 CG  LEU  277 20.910  5.192   35.111 1.000 26.34
ANISOU 1910 CG  LEU  277 3662    2367    3978   -980  -547 944
ATOM   1911 CD1 LEU  277 22.396  4.839   35.069 1.000 38.04
ANISOU 1911 CD1 LEU  277 3764    3171    7518   -487  -2057  853
ATOM   1912 CD2 LEU  277 20.708  6.607   34.631 1.000 31.98
ANISOU 1912 CD2 LEU  277 4023    2018    6109   -366  508  732
ATOM   1913 N   ALA  278 17.875  2.711   36.202 1.000 17.30
ANISOU 1913 N   ALA  278 2015    1766    2793   74 218 115
ATOM   1914 CA  ALA  278 17.124  2.712   37.464 1.000 16.75
ANISOU 1914 CA  ALA  278 2200    1566    2600   216   146  - 2
ATOM   1915 C   ALA  278 17.575  1.523   38.313 1.000 16.31
ANISOU 1915 C   ALA  278 1849    1553    2794   -337  -196 107
ATOM   1916 O   ALA  278 17.718  1.635   39.523 1.000 17.26
ANISOU 1916 O   ALA  278 1963    1839    2754   -62   -53  205
ATOM   1917 CB  ALA  278 15.642  2.622   37.177 1.000 17.55
ANISOU 1917 CB  ALA  278 2109    1880    2679   295   195  - 11
ATOM   1918 N   ARG  279 17.724  0.362   37.696 1.000 17.07
ANISOU 1918 N   ARG  279 2322    1399    2766   -178  26 308
ATOM   1919 CA  ARG  279 18.099 -0.829  38.473 1.000 16.93
ANISOU 1919 CA  ARG  279 2377    1734    2323   15 -241  203
ATOM   1920 C   ARG  279 19.477 -0.587  39.098 1.000 19.87
ANISOU 1920 C   ARG  279 2491    2292    2766   -487  -384 543
ATOM   1921 O   ARG  279 19.687 -0.974  40.234 1.000 33.04
ANISOU 1921 O   ARG  279 3615    4823    4115   -1726 -1700  2603
ATOM   1922 CB  ARG  279 18.164 -2.042  37.517 1.000 20.04
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ANISOU 1922 CB  ARG  279 2042    1609    3964    108   -221 -305
ATOM   1923 CG  ARG  279 16.742  -2.491  37.179 1.000 20.73
ANISOU 1923 CG  ARG  279 2152    2728    2997    -98   -401 -351
ATOM   1924 CD  ARG  279 16.601  -3.422  35.990 1.000 24.81
ANISOU 1924 CD  ARG  279 3213    2982    3231    -1 -507  -609
ATOM   1925 NE  ARG  279 17.575  -4.484  36.195 1.000 27.50
ANISOU 1925 NE  ARG  279 4331    2656    3463    355   -146 -181
ATOM   1926 CZ  ARG  279 17.301  -5.725  36.620 1.000 41.33
ANISOU 1926 CZ  ARG  279 7720    2466    5519   -186  -454 -142
ATOM   1927 NH1 ARG  279 16.024  -6.012  36.866 1.000 40.58
ANISOU 1927 NH1 ARG  279 8821    3012    3585   -1564 507  452
ATOM   1928 NH2 ARG  279 18.200  -6.688  36.807 1.000 53.27
ANISOU 1928 NH2 ARG  279 9516    2227    8496   -127  -4607 -463
ATOM   1929 N   GLU  280 20.390   0.119  38.424 1.000 19.68
ANISOU 1929 N   GLU  280 2172    2276    3028    84 324 136
ATOM   1930 CA  GLU  280 21.748   0.334  38.948 1.000 20.28
ANISOU 1930 CA  GLU  280 2046    2274    3385    25 581 115
ATOM   1931 C   GLU  280 21.705   1.257  40.182 1.000 20.67
ANISOU 1931 C   GLU  280 2334    1968    3552   -281  285  2  0
ATOM   1932 O   GLU  280 22.723   1.079  40.908 1.000 26.81
ANISOU 1932 O   GLU  280 2659    3419    4107    -37   -183 -87
ATOM   1933 CB  GLU  280 22.651   1.029  37.926 1.000 24.69
ANISOU 1933 CB  GLU  280 2778    2558    4044    -351  1022 303
ATOM   1934 CG  GLU  280 22.997   0.342  36.634 1.000 27.13
ANISOU 1934 CG  GLU  280 2605    4888    2816    596   116  623
ATOM   1935 CD  GLU  280 23.815   1.298  35.760 1.000 43.10
ANISOU 1935 CD  GLU  280 4693    7780    3903   -1328 1206 834
ATOM   1936 OE1 GLU  280 24.541   2.171  36.296 1.000 41.36
ANISOU 1936 OE1 GLU  280 2666    6033    7015   27 1099  690
ATOM   1937 OE2 GLU  280 23.727   1.219  34.520 1.000 64.81
ANISOU 1937 OE2 GLU  280 10844   10028    3751   -2356 1104 2134
ATOM   1938 N   CYS  281 20.777   2.156  40.313 1.000 21.61
ANISOU 1938 N   CYS  281 2372    2240    3599   -211  532  -238
ATOM   1939 CA  CYS  281 20.481   3.164  41.337 1.000 24.33
ANISOU 1939 CA  CYS  281 2114    2911    4219   -526  1121 -817
ATOM   1940 C   CYS  281 19.858   2.568  42.585 1.000 27.11
ANISOU 1940 C   CYS  281 2492    3261    4546   -1608 1457 -1343
ATOM   1941 O   CYS  281 19.789   3.161  43.685 1.000 19.19
ANISOU 1941 O   CYS  281 1997    2012    3282   -250  -326 135
ATOM   1942 CB  CYS  281 19.632   4.438  40.795 1.000 22.02
ANISOU 1942 CB  CYS  281 1214    3088    4063   -286  100  -2108
ATOM   1943 SG  CYS  281 20.639   5.092  39.444 1.000 53.41
ANISOU 1943 SG  CYS  281 10822   4742    4730   -3261 1316 4  5
ATOM   1944 N   GLY  282 19.370   1.317  42.565 1.000 18.81
ANISOU 1944 N   GLY  282 1230    2224    3695    3  -149  -206
ATOM   1945 CA  GLY  282 18.675   0.750  43.744 1.000 17.07
ANISOU 1945 CA  GLY  282 1544    1771    3171    31 -552  -168
ATOM   1946 C   GLY  282 17.194   0.496  43.538 1.000 14.91
ANISOU 1946 C   GLY  282 1601    1645    2417   -135  -453 378
ATOM   1947 O   GLY  282 16.480  -0.062  44.380 1.000 16.38
ANISOU 1947 O   GLY  282 1998    1921    2306   -211  -399 360
ATOM   1948 N   PHE  283 16.625   0.919  42.404 1.000 13.44
ANISOU 1948 N   PHE  283 1563    1539    2006   -189  -336 -115
ATOM   1949 CA  PHE  283 15.173   0.829  42.203 1.000 14.52
ANISOU 1949 CA  PHE  283 1677    1410    2428   -187  -670 4  6
ATOM   1950 C   PHE  283 14.810  -0.604  41.809 1.000 13.08
ANISOU 1950 C   PHE  283 1519    1314    2137   -121  -338 174
ATOM   1951 O   PHE  283 15.311  -1.184  40.837 1.000 14.11
ANISOU 1951 O   PHE  283 1366    1418    2578   -142  -78  1  7
ATOM   1952 CB  PHE  283 14.749   1.800  41.078 1.000 13.76
ANISOU 1952 CB  PHE  283 1814    1288    2125   -39   -268 0
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ATOM   1953 CG  PHE  283 14.842  3.269   41.512 1.000 14.75
ANISOU 1953 CG  PHE  283 1985    1363    2255   12 -317  - 3
ATOM   1954 CD1 PHE  283 13.814  3.904   42.142 1.000 21.50
ANISOU 1954 CD1 PHE  283 2318    1759    4091   303   -23  -626
ATOM   1955 CD2 PHE  283 15.994  3.999   41.298 1.000 17.72
ANISOU 1955 CD2 PHE  283 2526    1244    2963   -307  -89  272
ATOM   1956 CE1 PHE  283 13.909  5.177   42.655 1.000 20.78
ANISOU 1956 CE1 PHE  283 2056    1802    4036   92 66 -647
ATOM   1957 CE2 PHE  283 16.115  5.290   41.814 1.000 15.06
ANISOU 1957 CE2 PHE  283 2101    1257    2364   -5 -255  377
ATOM   1958 CZ  PHE  283 15.084  5.891   42.506 1.000 18.04
ANISOU 1958 CZ  PHE  283 1881    1995    2979   192   -432 2 0
ATOM   1959 N   ASP  284 13.883 -1.178   42.579 1.000 13.07
ANISOU 1959 N   ASP  284 1549    1366    2049   -73   -331 1 1 7
ATOM   1960 CA  ASP  284 13.502 -2.584   42.395 1.000 12.80
ANISOU 1960 CA  ASP  284 1481    1460    1924   -231  -207 1 5 7
ATOM   1961 C   ASP  284 12.335 -2.654   41.421 1.000 12.88
ANISOU 1961 C   ASP  284 1493    1508    1891   -19   -180 - 5 5
ATOM   1962 O   ASP  284 11.231 -3.147   41.741 1.000 13.69
ANISOU 1962 O   ASP  284 1407    1351    2442   -93   -281 9 2
ATOM   1963 CB  ASP  284 13.141 -3.203   43.744 1.000 14.10
ANISOU 1963 CB  ASP  284 1966    1534    1858   -40   -11  1 4 5
ATOM   1964 CG  ASP  284 13.165 -4.730   43.717 1.000 14.49
ANISOU 1964 CG  ASP  284 1906    1520    2079   47 -424  2 9 0
ATOM   1965 OD1 ASP  284 13.732 -5.305   42.758 1.000 14.81
ANISOU 1965 OD1 ASP  284 2036    1343    2250   -152  -166 2 3 1
ATOM   1966 OD2 ASP  284 12.652 -5.310   44.696 1.000 15.32
ANISOU 1966 OD2 ASP  284 1979    1557    2286   -79   -109 1 5 3
ATOM   1967 N   VAL  285 12.644 -2.191   40.217 1.000 12.40
ANISOU 1967 N   VAL  285 1582    1260    1870   79 -185  -131
ATOM   1968 CA  VAL  285 11.599 -2.064   39.216 1.000 12.31
ANISOU 1968 CA  VAL  285 1442    1469    1767   -161  -59  - 1
ATOM   1969 C   VAL  285 11.229 -3.419   38.589 1.000 12.09
ANISOU 1969 C   VAL  285 1220    1407    1967   -1 -100  - 7 9
ATOM   1970 O   VAL  285 12.085 -4.311   38.433 1.000 13.68
ANISOU 1970 O   VAL  285 1237    1514    2446   67 56 4 0
ATOM   1971 CB  VAL  285 12.009 -1.066   38.098 1.000 14.68
ANISOU 1971 CB  VAL  285 1943    1621    2014   -163  -50  2 5 9
ATOM   1972 CG1 VAL  285 12.131  0.332   38.672 1.000 17.08
ANISOU 1972 CG1 VAL  285 2429    1402    2658   18 -465  4 2 5
ATOM   1973 CG2 VAL  285 13.309 -1.499   37.433 1.000 15.69
ANISOU 1973 CG2 VAL  285 2131    2180    1649   -316  161  3 0 6
ATOM   1974 N   SER  286 9.952  -3.541   38.241 1.000 12.24
ANISOU 1974 N   SER  286 1263    1440    1946   -12   -148 - 1 1 7
ATOM   1975 CA  SER  286 9.398  -4.669   37.495 1.000 12.84
ANISOU 1975 CA  SER  286 1571    1463    1845   -356  -30  1 4
ATOM   1976 C   SER  286 8.861  -4.118   36.172 1.000 11.99
ANISOU 1976 C   SER  286 1516    1374    1666   -28   60 -198
ATOM   1977 O   SER  286 7.654  -4.110   35.917 1.000 15.68
ANISOU 1977 O   SER  286 1514    2384    2059   2  18 - 2 0
ATOM   1978 CB  SER  286 8.301  -5.327   38.300 1.000 12.54
ANISOU 1978 CB  SER  286 1407    1442    1915   -59   170  - 5 5
ATOM   1979 OG  SER  286 7.415  -4.380   38.890 1.000 13.15
ANISOU 1979 OG  SER  286 1531    1430    2034   105   -73  - 5 9
ATOM   1980 N   LEU  287 9.769  -3.649   35.333 1.000 13.56
ANISOU 1980 N   LEU  287 1574    1521    2058   41 133 1 7 7
ATOM   1981 CA  LEU  287 9.451  -2.932   34.101 1.000 13.48
ANISOU 1981 CA  LEU  287 1812    1418    1891   -84   116  1 7
ATOM   1982 C   LEU  287 10.075 -3.654   32.908 1.000 15.12
ANISOU 1982 C   LEU  287 1945    1714    2086   32 233 - 3 1
ATOM   1983 O   LEU  287 11.277 -3.883   32.927 1.000 17.91
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ANISOU 1983 O   LEU  287 1885    2275    2645    109    300   -275
ATOM   1984 CB  LEU  287 9.954   -1.480  34.118 1.000 14.37
ANISOU 1984 CB  LEU  287 1773    1380    2306    -34    248   107
ATOM   1985 CG  LEU  287 9.362   -0.603  35.231 1.000 14.32
ANISOU 1985 CG  LEU  287 1421    1496    2523    62  52  -158
ATOM   1986 CD1 LEU  287 10.143  0.705   35.413 1.000 14.53
ANISOU 1986 CD1 LEU  287 1672    1444    2403    0  -146   143
ATOM   1987 CD2 LEU  287 7.921   -0.197  34.820 1.000 16.03
ANISOU 1987 CD2 LEU  287 1476    2035    2579    166    -100  -  7
ATOM   1988 N   ASP  288 9.256   -4.060  31.958 1.000 15.09
ANISOU 1988 N   ASP  288 2041    1611    2081    73  175  -216
ATOM   1989 CA  ASP  288 9.764   -4.722  30.757 1.000 16.55
ANISOU 1989 CA  ASP  288 1992    2028    2268    29  335  -314
ATOM   1990 C   ASP  288 10.437  -3.682  29.874 1.000 18.74
ANISOU 1990 C   ASP  288 2484    2597    2040    -231   97  8  1
ATOM   1991 O   ASP  288 9.998   -2.526  29.849 1.00   25.48
ANISOU 1991 O   ASP  288 3382    2433    3865    -322  639   346
ATOM   1992 CB  ASP  288 8.659   -5.490  30.060 1.000 19.23
ANISOU 1992 CB  ASP  288 2431    2414    2460    -209  258   -720
ATOM   1993 CG  ASP  288 9.139   -6.468  29.000 1.000 19.50
ANISOU 1993 CG  ASP  288 2688    2223    2499    -49   393   -552
ATOM   1994 OD1 ASP  288 10.173  -7.145  29.185 1.000 27.03
ANISOU 1994 OD1 ASP  288 3134    3038    4100    624   427   -716
ATOM   1995 OD2 ASP  288 8.458   -6.566  27.955 1.000 31.00
ANISOU 1995 OD2 ASP  288 3596    4859    3325    307   -361  -2100
ATOM   1996 N   GLY  289 11.489  -4.035  29.137 1.000 22.68
ANISOU 1996 N   GLY  289 2960    2893    2765    -531  778   116
ATOM   1997 CA  GLY  289 12.008  -3.083  28.169 1.000 25.60
ANISOU 1997 CA  GLY  289 3678    3562    2486    -1469 558   1  1
ATOM   1998 C   GLY  289 12.988  -2.078  28.725 1.000 21.08
ANISOU 1998 C   GLY  289 2567    2916    2528    -485  353   150
ATOM   1999 O   GLY  289 13.411  -2.097  29.891 1.000 23.72
ANISOU 1999 O   GLY  289 3428    3219    2364    -1104 440   113
ATOM   2000 N   GLU  290 13.402  -1.168  27.818 1.000 18.32
ANISOU 2000 N   GLU  290 2246    2396    2319    -145  616   -115
ATOM   2001 CA  GLU  290 14.538  -0.301  28.074 1.000 17.75
ANISOU 2001 CA  GLU  290 1912    2419    2412    97 770  -367
ATOM   2002 C   GLU  290 14.261  1.058   28.696 1.000 17.90
ANISOU 2002 C   GLU  290 2180    2308    2313    50 711  -297
ATOM   2003 O   GLU  290 15.143  1.619   29.353 1.000 17.58
ANISOU 2003 O   GLU  290 2525    2050    2104    -35   380   165
ATOM   2004 CB  GLU  290 15.341  -0.161  26.785 1.000 23.21
ANISOU 2004 CB  GLU  290 3184    2508    3126    -273  1753  -467
ATOM   2005 CG  GLU  290 15.833  -1.492  26.226 1.000 24.55
ANISOU 2005 CG  GLU  290 3609    2992    2725    348   1232  -743
ATOM   2006 CD  GLU  290 16.676  -2.280  27.221 1.000 30.03
ANISOU 2006 CD  GLU  290 3365    3708    4337    476   753   -211
ATOM   2007 OE1 GLU  290 17.492  -1.684  27.947 1.000 40.04
ANISOU 2007 OE1 GLU  290 5043    6674    3498    525   36  -1226
ATOM   2008 OE2 GLU  290 16.622  -3.527  27.237 1.000 51.76
ANISOU 2008 OE2 GLU  290 8785    3812    7070    -12   -483  1583
ATOM   2009 N   THR  291 13.064  1.578   28.486 1.000 18.14
ANISOU 2009 N   THR  291 2305    2486    2103    224   711   -321
ATOM   2010 CA  THR  291 12.697  2.896   29.049 1.000 18.72
ANISOU 2010 CA  THR  291 2521    2080    2511    105   1131  6  6
ATOM   2011 C   THR  291 11.278  2.744   29.593 1.000 15.79
ANISOU 2011 C   THR  291 2178    1758    2064    134   538   -50
ATOM   2012 O   THR  291 10.517  1.834   29.217 1.000 18.62
ANISOU 2012 O   THR  291 2764    1966    2344    -248  664   -311
ATOM   2013 CB  THR  291 12.722  4.031   28.044 1.000 21.54
ANISOU 2013 CB  THR  291 3043    2625    2516    -164  891   362
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ATOM   2014 OG1 THR  291 11.695   3.862   27.077 1.000 25.98
ANISOU 2014 OG1 THR  291 3160    4072    2641   -86   703  503
ATOM   2015 CG2 THR  291 14.048   4.115   27.292 1.000 24.20
ANISOU 2015 CG2 THR  291 3199    3832    2164   -445  930  533
ATOM   2016 N   ALA  292 10.959   3.658   30.492 1.000 14.84
ANISOU 2016 N   ALA  292 1637    1656    2347   200   429  -153
ATOM   2017 CA  ALA  292 9.675    3.657   31.179 1.000 13.84
ANISOU 2017 CA  ALA  292 1488    1477    2294   170   299  78
ATOM   2018 C   ALA  292 9.356    5.065   31.619 1.000 12.65
ANISOU 2018 C   ALA  292 1334    1564    1908   60 144 -139
ATOM   2019 O   ALA  292 10.228   5.939   31.710 1.000 14.27
ANISOU 2019 O   ALA  292 1529    1596    2295   -35   109  116
ATOM   2020 CB  ALA  292 9.670    2.754   32.414 1.000 14.02
ANISOU 2020 CB  ALA  292 1693    1580    2053   37 22 -27
ATOM   2021 N   THR  293 8.054    5.258   31.916 1.000 13.54
ANISOU 2021 N   THR  293 1468    1617    2058   117   373  -118
ATOM   2022 CA  THR  293 7.605    6.546   32.424 1.000 13.40
ANISOU 2022 CA  THR  293 1565    1647    1877   152   209  -232
ATOM   2023 C   THR  293 7.407    6.482   33.952 1.000 12.09
ANISOU 2023 C   THR  293 1345    1322    1927   -62   326  -12
ATOM   2024 O   THR  293 7.214    5.441   34.555 1.000 12.93
ANISOU 2024 O   THR  293 1385    1356    2170   -190  194  90
ATOM   2025 CB  THR  293 6.295    7.058   31.788 1.000 13.45
ANISOU 2025 CB  THR  293 1598    1579    1935   95 345 345
ATOM   2026 OG1 THR  293 5.273    6.112   32.117 1.000 13.75
ANISOU 2026 OG1 THR  293 1672    1570    1981   -12   314  135
ATOM   2027 CG2 THR  293 6.476    7.139   30.272 1.000 15.93
ANISOU 2027 CG2 THR  293 2121    2022    1911   255   434  337
ATOM   2028 N   PHE  294 7.241    7.661   34.544 1.000 12.81
ANISOU 2028 N   PHE  294 1607    1440    1822   -83   149  -151
ATOM   2029 CA  PHE  294 6.857    7.773   35.935 1.000 12.37
ANISOU 2029 CA  PHE  294 1332    1469    1899   -267  166  -289
ATOM   2030 C   PHE  294 5.556    7.022   36.184 1.000 12.36
ANISOU 2030 C   PHE  294 1336    1361    1999   -151  30 -36
ATOM   2031 O   PHE  294 5.403    6.253   37.143 1.000 13.27
ANISOU 2031 O   PHE  294 1556    1410    2076   -191  183  46
ATOM   2032 CB  PHE  294 6.698    9.271   36.267 1.000 13.83
ANISOU 2032 CB  PHE  294 2039    1351    1866   -192  -29  -177
ATOM   2033 CG  PHE  294 6.306    9.488   37.711 1.000 13.10
ANISOU 2033 CG  PHE  294 1786    1216    1974   -125  -63  -244
ATOM   2034 CD1 PHE  294 7.207    9.411   38.749 1.000 17.41
ANISOU 2034 CD1 PHE  294 2132    2533    1952   -1012 -287 76
ATOM   2035 CD2 PHE  294 4.964    9.739   38.026 1.000 18.41
ANISOU 2035 CD2 PHE  294 2156    2263    2575   565   332  57
ATOM   2036 CE1 PHE  294 6.810    9.608   40.054 1.000 17.72
ANISOU 2036 CE1 PHE  294 2348    2296    2086   -308  -362 -136
ATOM   2037 CE2 PHE  294 4.591    10.010  39.324 1.000 19.37
ANISOU 2037 CE2 PHE  294 2078    2541    2740   330   232  -630
ATOM   2038 CZ  PHE  294 5.507    9.956   40.355 1.000 18.36
ANISOU 2038 CZ  PHE  294 2443    1678    2855   -394  -55  -245
ATOM   2039 N   GLN  295 4.588    7.205   35.246 1.000 12.59
ANISOU 2039 N   GLN  295 1248    1429    2106   -62   38  -168
ATOM   2040 CA  GLN  295 3.320    6.484   35.408 1.000 12.76
ANISOU 2040 CA  GLN  295 1266    1215    2365   7  -157  -117
ATOM   2041 C   GLN  295 3.512    4.984   35.318 1.000 12.24
ANISOU 2041 C   GLN  295 1449    1256    1944   10 1  -73
ATOM   2042 O   GLN  295 2.922    4.238   36.101 1.000 13.61
ANISOU 2042 O   GLN  295 1323    1427    2424   7  85 155
ATOM   2043 CB  GLN  295 2.375    6.975   34.317 1.000 14.31
ANISOU 2043 CB  GLN  295 1227    1594    2616   81 -133  192
ATOM   2044 CG  GLN  295 1.062    6.256   34.249 1.000 14.03
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ANISOU 2044 CG  GLN  295 1391   1509   2430   -59   -300 4 7
ATOM   2045 CD  GLN  295 0.157  6.687  33.115 1.000 13.56
ANISOU 2045 CD  GLN  295 1305   1486   2361   133   -117 1 6 5
ATOM   2046 OE1 GLN  295 0.459  7.693  32.419 1.000 15.35
ANISOU 2046 OE1 GLN  295 1811   1651   2371   161   206  2 2 0
ATOM   2047 NE2 GLN  295 -0.982 6.026  32.943 1.000 15.04
ANISOU 2047 NE2 GLN  295 1225   1995   2493   75 -139  - 9 9
ATOM   2048 N   ASP  296 4.363  4.463  34.423 1.000 12.66
ANISOU 2048 N   ASP  296 1425   1396   1990   181   -112 - 1 1 0
ATOM   2049 CA  ASP  296 4.653  3.016  34.439 1.000 12.26
ANISOU 2049 CA  ASP  296 1628   1274   1755   53 -51 - 1 5 1
ATOM   2050 C   ASP  296 5.167  2.569  35.792 1.000 11.57
ANISOU 2050 C   ASP  296 1199   1300   1895   -82   30 - 2 2
ATOM   2051 O   ASP  296 4.854  1.460  36.224 1.000 13.08
ANISOU 2051 O   ASP  296 1534   1368   2070   -107  38 1 3 9
ATOM   2052 CB  ASP  296 5.709  2.634  33.399 1.000 14.18
ANISOU 2052 CB  ASP  296 1870   1700   1819   141   30 - 3 7 8
ATOM   2053 CG  ASP  296 5.295  2.848  31.952 1.000 13.32
ANISOU 2053 CG  ASP  296 1655   1557   1848   -58   67 2
ATOM   2054 OD1 ASP  296 4.110  2.725  31.601 1.000 15.83
ANISOU 2054 OD1 ASP  296 1680   1935   2402   -68   -126 - 1 8 9
ATOM   2055 OD2 ASP  296 6.212  3.098  31.114 1.000 15.27
ANISOU 2055 OD2 ASP  296 1757   1937   2106   -229  137  1 7 7
ATOM   2056 N   TRP  297 6.038  3.352  36.416 1.000 12.26
ANISOU 2056 N   TRP  297 1325   1403   1931   -34   -123 - 1 1 8
ATOM   2057 CA  TRP  297 6.683  2.960  37.656 1.000 12.82
ANISOU 2057 CA  TRP  297 1328   1599   1943   -104  -49  1 5 1
ATOM   2058 C   TRP  297 5.746  3.007  38.858 1.000 13.13
ANISOU 2058 C   TRP  297 1418   1580   1992   24 -23 1 8 5
ATOM   2059 O   TRP  297 5.565  2.030  39.584 1.000 14.03
ANISOU 2059 O   TRP  297 1554   1619   2159   102   137  3 2 0
ATOM   2060 CB  TRP  297 7.908  3.847  37.928 1.000 13.68
ANISOU 2060 CB  TRP  297 1130   1692   2376   -19   -169 1 5 1
ATOM   2061 CG  TRP  297 8.646  3.455  39.166 1.000 13.28
ANISOU 2061 CG  TRP  297 1143   1646   2255   91 -96 2 2
ATOM   2062 CD1 TRP  297 8.932  2.179  39.622 1.000 15.58
ANISOU 2062 CD1 TRP  297 1615   1689   2618   275   -544 - 7 7
ATOM   2063 CD2 TRP  297 9.144  4.353  40.189 1.000 14.69
ANISOU 2063 CD2 TRP  297 1327   1693   2562   -117  -219 5
ATOM   2064 NE1 TRP  297 9.583  2.265  40.840 1.000 15.34
ANISOU 2064 NE1 TRP  297 1378   1853   2598   70 -494  7 5
ATOM   2065 CE2 TRP  297 9.724  3.597  41.203 1.000 16.13
ANISOU 2065 CE2 TRP  297 1241   2009   2880   182   -676 - 1 9 6
ATOM   2066 CE3 TRP  297 9.094  5.756  40.284 1.000 22.13
ANISOU 2066 CE3 TRP  297 3040   1658   3712   -665  -1408  1 2 9
ATOM   2067 CZ2 TRP  297 10.318 4.180  42.316 1.000 18.45
ANISOU 2067 CZ2 TRP  297 2204   2387   2418   44 -326  - 3 3 1
ATOM   2068 CZ3 TRP  297 9.670  6.353  41.399 1.000 21.55
ANISOU 2068 CZ3 TRP  297 2916   2104   3167   -55   -752 - 4 5 8
ATOM   2069 CH2 TRP  297 10.258 5.546  42.397 1.000 23.53
ANISOU 2069 CH2 TRP  297 3298   2356   3285   -320  -1146  - 3 4 4
ATOM   2070 N   ILE  298 5.106  4.167  39.044 1.000 13.58
ANISOU 2070 N   ILE  298 1324   1726   2108   241   -167 1 2 7
ATOM   2071 CA  ILE  298 4.299  4.440  40.229 1.000 14.68
ANISOU 2071 CA  ILE  298 1413   2177   1986   -13   -161 - 2 0 8
ATOM   2072 C   ILE  298 2.841  4.054  40.121 1.000 12.02
ANISOU 2072 C   ILE  298 1455   1300   1813   56 -239  4 0 2
ATOM   2073 O   ILE  298 2.182  3.782  41.147 1.000 13.67
ANISOU 2073 O   ILE  298 1732   1582   1881   -23   -4 1 9 3
ATOM   2074 CB  ILE  298 4.428  5.914  40.673 1.000 19.45
ANISOU 2074 CB  ILE  298 2261   2446   2683   -699  237  - 8 3 5
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ATOM   2075 CG1 ILE  298 5.907   6.245   41.001 1.000 27.83
ANISOU 2075 CG1 ILE  298 2776    4275    3525   -1314 -556 -1030
ATOM   2076 CG2 ILE  298 3.679   6.319   41.929 1.000 25.05
ANISOU 2076 CG2 ILE  298 3770    3344    2405   -57   255  -983
ATOM   2077 CD1 ILE  298 6.368   5.628   42.306 1.000 43.32
ANISOU 2077 CD1 ILE  298 4561    7224    4674   -652  -1890 -117
ATOM   2078 N   GLY  299 2.317   3.980   38.893 1.000 12.16
ANISOU 2078 N   GLY  299 1432    1308    1879   78 -304  106
ATOM   2079 CA  GLY  299 0.918   3.741   38.670 1.000 12.98
ANISOU 2079 CA  GLY  299 1276    1279    2379   106   -188 -154
ATOM   2080 C   GLY  299 0.135   5.017   38.378 1.000 13.09
ANISOU 2080 C   GLY  299 1421    1403    2151   113   -231 118
ATOM   2081 O   GLY  299 0.738   6.025   38.017 1.000 14.00
ANISOU 2081 O   GLY  299 1713    1353    2252   122   289  -13
ATOM   2082 N   GLY  300 -1.183  4.917   38.447 1.000 13.08
ANISOU 2082 N   GLY  300 1325    1545    2099   146   -267 -145
ATOM   2083 CA  GLY  300 -2.075  5.966   37.992 1.000 13.45
ANISOU 2083 CA  GLY  300 1447    1521    2143   116   -415 -143
ATOM   2084 C   GLY  300 -2.519  6.972   39.042 1.000 12.94
ANISOU 2084 C   GLY  300 1098    1365    2456   -52   -407 -192
ATOM   2085 O   GLY  300 -3.262  7.875   38.672 1.000 13.39
ANISOU 2085 O   GLY  300 1321    1342    2423   -19   -217 - 45
ATOM   2086 N   ASN  301 -1.973  6.845   40.254 1.000 13.35
ANISOU 2086 N   ASN  301 1494    1429    2151   -225  -232 -104
ATOM   2087 CA  ASN  301 -2.162  7.842   41.313 1.000 13.83
ANISOU 2087 CA  ASN  301 1590    1435    2230   -194  -38  - 61
ATOM   2088 C   ASN  301 -0.837  8.254   41.885 1.000 12.46
ANISOU 2088 C   ASN  301 1676    1268    1791   -35   -142 - 20
ATOM   2089 O   ASN  301 -0.007  7.405   42.169 1.000 13.89
ANISOU 2089 O   ASN  301 1831    1355    2093   73 -144  - 13
ATOM   2090 CB  ASN  301 -3.075  7.238   42.360 1.000 16.01
ANISOU 2090 CB  ASN  301 1632    1909    2542   77 224 315
ATOM   2091 CG  ASN  301 -3.942  8.199   43.106 1.000 18.23
ANISOU 2091 CG  ASN  301 1986    2508    2435   190   152  - 90
ATOM   2092 OD1 ASN  301 -4.973  8.690   42.614 1.000 17.44
ANISOU 2092 OD1 ASN  301 1606    1626    3394   -21   144  -190
ATOM   2093 ND2 ASN  301 -3.518  8.454   44.338 1.000 33.30
ANISOU 2093 ND2 ASN  301 2804    6923    2928   1012  -230 -1523
ATOM   2094 N   TYR  302 -0.595  9.564   42.073 1.000 12.96
ANISOU 2094 N   TYR  302 1662    1278    1985   -69   -21  -135
ATOM   2095 CA  TYR  302 0.674   9.948   42.702 1.000 13.48
ANISOU 2095 CA  TYR  302 1673    1259    2192   -130  -132 3  4
ATOM   2096 C   TYR  302 0.768   9.269   44.078 1.000 12.63
ANISOU 2096 C   TYR  302 1413    1293    2092   53 44 1  9
ATOM   2097 O   TYR  302 -0.218  9.151   44.806 1.000 14.15
ANISOU 2097 O   TYR  302 1332    1737    2305   -65   48 - 27
ATOM   2098 CB  TYR  302 0.764   11.472  42.916 1.000 13.30
ANISOU 2098 CB  TYR  302 1635    1192    2226   -81   33 4  1
ATOM   2099 CG  TYR  302 1.159   12.143  41.619 1.000 12.02
ANISOU 2099 CG  TYR  302 1586    1103    1880   -59   -25  - 271
ATOM   2100 CD1 TYR  302 2.501   12.233  41.275 1.000 13.11
ANISOU 2100 CD1 TYR  302 1633    1284    2066   -80   11 - 18
ATOM   2101 CD2 TYR  302 0.235   12.709  40.739 1.000 12.52
ANISOU 2101 CD2 TYR  302 1576    1132    2049   -44   13 - 127
ATOM   2102 CE1 TYR  302 2.933   12.822  40.119 1.000 12.29
ANISOU 2102 CE1 TYR  302 1581    1043    2045   -185  -84  - 77
ATOM   2103 CE2 TYR  302 0.637   13.273  39.535 1.000 14.12
ANISOU 2103 CE2 TYR  302 1462    1443    2458   -241  15 3 25
ATOM   2104 CZ  TYR  302 1.983   13.347  39.241 1.000 12.69
ANISOU 2104 CZ  TYR  302 1483    1224    2113   -287  -91  1  0
ATOM   2105 OH  TYR  302 2.376   13.866  38.013 1.000 13.42
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ANISOU 2105 OH  TYR 302 1505   1469   2124   -93   33 1 4 6
ATOM   2106 N   VAL 303 1.956  8.855  44.450 1.000 13.92
ANISOU 2106 N   VAL 303 1406   1637   2246   153   88 9 9
ATOM   2107 CA  VAL 303 2.355  8.336  45.746 1.000 14.51
ANISOU 2107 CA  VAL 303 1838   1320   2355   -137  -391 - 7 4
ATOM   2108 C   VAL 303 3.498  9.244  46.239 1.000 15.23
ANISOU 2108 C   VAL 303 1404   1507   2876   -102  -105 - 3 4 8
ATOM   2109 O   VAL 303 4.471  9.386  45.512 1.000 18.70
ANISOU 2109 O   VAL 303 1859   1861   3386   -239  326  - 5 0 4
ATOM   2110 CB  VAL 303 2.856  6.880  45.632 1.000 16.75
ANISOU 2110 CB  VAL 303 2140   1319   2905   16 -759  - 1 2 3
ATOM   2111 CG1 VAL 303 3.279  6.401  47.017 1.000 19.53
ANISOU 2111 CG1 VAL 303 2185   1951   3284   232  -1054  1 4 8
ATOM   2112 CG2 VAL 303 1.723  5.956  45.125 1.000 17.82
ANISOU 2112 CG2 VAL 303 2476   1442   2852   -213  -558 - 4 0 6
ATOM   2113 N   ASN 304 3.349  9.900  47.378 1.000 14.07
ANISOU 2113 N   ASN 304 1409   1369   2566   -39   -407 - 8 6
ATOM   2114 CA  ASN 304 4.317  10.928 47.772 1.000 14.31
ANISOU 2114 CA  ASN 304 1474   1387   2578   -102  -424 - 5 5
ATOM   2115 C   ASN 304 5.450  10.397 48.637 1.000 13.75
ANISOU 2115 C   ASN 304 1360   1487   2378   34 -274  - 8 7
ATOM   2116 O   ASN 304 6.539  10.962 48.584 1.000 14.60
ANISOU 2116 O   ASN 304 1314   1795   2438   -34   -55  - 3 2 0
ATOM   2117 CB  ASN 304 3.589  12.035 48.551 1.000 14.26
ANISOU 2117 CB  ASN 304 1710   1214   2494   6  -303  1 7 6
ATOM   2118 CG  ASN 304 2.535  12.661 47.642 1.000 14.81
ANISOU 2118 CG  ASN 304 1551   1627   2449   23 -114  4 0 2
ATOM   2119 OD1 ASN 304 2.866  13.255 46.622 1.000 16.52
ANISOU 2119 OD1 ASN 304 1896   1746   2636   80 19 5 8 9
ATOM   2120 ND2 ASN 304 1.290  12.595 48.102 1.000 18.43
ANISOU 2120 ND2 ASN 304 1560   2980   2463   127   -10  1 9 9
ATOM   2121 N   ILE 305 5.175  9.413  49.463 1.000 16.36
ANISOU 2121 N   ILE 305 1546   1553   3117   -78   -503 2 6 6
ATOM   2122 CA  ILE 305 6.173  8.890  50.407 1.000 14.85
ANISOU 2122 CA  ILE 305 1670   1537   2436   165   -277 - 4 0
ATOM   2123 C   ILE 305 6.183  7.372  50.352 1.000 15.78
ANISOU 2123 C   ILE 305 1527   1555   2914   95 -438  - 5 1
ATOM   2124 O   ILE 305 5.231  6.736  49.886 1.000 17.54
ANISOU 2124 O   ILE 305 1463   1789   3412   -131  -404 5
ATOM   2125 CB  ILE 305 5.949  9.430  51.818 1.000 17.80
ANISOU 2125 CB  ILE 305 2167   1962   2634   -23   265  - 2 0 9
ATOM   2126 CG1 ILE 305 4.578  9.091  52.416 1.000 18.93
ANISOU 2126 CG1 ILE 305 1716   2948   2526   1  -218  - 1 6 3
ATOM   2127 CG2 ILE 305 6.171  10.944 51.823 1.000 19.17
ANISOU 2127 CG2 ILE 305 2685   1863   2737   70 -534  - 4 0 5
ATOM   2128 CD1 ILE 305 4.415  9.459  53.863 1.000 21.28
ANISOU 2128 CD1 ILE 305 2521   2902   2662   19 452 - 7 1
ATOM   2129 N   ARG 306 7.246  6.806  50.908 1.000 14.59
ANISOU 2129 N   ARG 306 1738   1641   2165   52 -356  2 7 1
ATOM   2130 CA  ARG 306 7.424  5.360  50.828 1.000 15.25
ANISOU 2130 CA  ARG 306 1509   1663   2622   139  -302 7 7
ATOM   2131 C   ARG 306 8.234  4.903  52.024 1.000 15.02
ANISOU 2131 C   ARG 306 1588   1464   2656   133  -332 - 2 1
ATOM   2132 O   ARG 306 9.141  5.614  52.433 1.000 16.63
ANISOU 2132 O   ARG 306 1682   2101   2536   -219  -294 - 1 6 8
ATOM   2133 CB  ARG 306 8.135  4.943  49.532 1.000 16.31
ANISOU 2133 CB  ARG 306 1820   1681   2697   -100  -270 - 1 5 0
ATOM   2134 CG  ARG 306 8.226  3.414  49.377 1.000 18.43
ANISOU 2134 CG  ARG 306 2476   1700   2828   40 -194  - 1 5 6
ATOM   2135 CD  ARG 306 8.401  3.068  47.900 1.000 18.26
ANISOU 2135 CD  ARG 306 2087   1971   2880   -120  -145 - 3 3 0
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ATOM   2136 NE  ARG  306 7.136   3.228   47.188 1.000 20.53
ANISOU 2136 NE  ARG  306 2442    2013    3345   -577  -669 -234
ATOM   2137 CZ  ARG  306 6.980   3.178   45.873 1.000 20.27
ANISOU 2137 CZ  ARG  306 2330    2057    3316   373   -522 2 0
ATOM   2138 NH1 ARG  306 8.086   3.000   45.107 1.000 22.13
ANISOU 2138 NH1 ARG  306 2136    2580    3695   274   -589 -723
ATOM   2139 NH2 ARG  306 5.759   3.250   45.341 1.000 18.44
ANISOU 2139 NH2 ARG  306 2107    1838    3062   259   -286 8 4
ATOM   2140 N   ARG  307 7.898   3.775   52.612 1.000 19.10
ANISOU 2140 N   ARG  307 2716    1872    2671   -294  -607 3 2 7
ATOM   2141 CA  ARG  307 8.576   3.212   53.768 1.000 21.13
ANISOU 2141 CA  ARG  307 3321    2201    2504   -48   -845 1 3 9
ATOM   2142 C   ARG  307 9.536   2.138   53.277 1.000 23.30
ANISOU 2142 C   ARG  307 3417    2170    3267   181   -1046 3 9
ATOM   2143 O   ARG  307 9.385   1.601   52.187 1.000 21.01
ANISOU 2143 O   ARG  307 2574    2355    3052   174   -728 1 1 2
ATOM   2144 CB  ARG  307 7.557   2.522   54.694 1.000 27.30
ANISOU 2144 CB  ARG  307 4545    3184    2645   -13   -247 7 0 5
ATOM   2145 CG  ARG  307 6.839   3.488   55.629 1.000 46.30
ANISOU 2145 CG  ARG  307 6310    6374    4907   215   1655 -970
ATOM   2146 CD  ARG  307 7.054   3.085   57.085 1.000 66.50
ANISOU 2146 CD  ARG  307 11107   10355   3806   -2980 2792 -1145
ATOM   2147 NE  ARG  307 5.989   2.203   57.531 1.000 78.91
ANISOU 2147 NE  ARG  307 11821   12833   5330   -4530 1969 - 5
ATOM   2148 CZ  ARG  307 5.987   1.285   58.479 1.000 73.67
ANISOU 2148 CZ  ARG  307 7704    14382   5907   -4724 1249 1051
ATOM   2149 NH1 ARG  307 7.063   1.038   59.214 1.000 80.32
ANISOU 2149 NH1 ARG  307 6613    17949   5955   -3290 2179 1 0 5
ATOM   2150 NH2 ARG  307 4.872   0.597   58.707 1.000 73.74
ANISOU 2150 NH2 ARG  307 9116    15919   2983   -6954 438  -917
ATOM   2151 N   THR  308 10.551  1.861   54.113 1.000 25.61
ANISOU 2151 N   THR  308 4234    2212    3285   536   -1421 -232
ATOM   2152 CA  THR  308 11.308  0.640   53.822 1.000 30.02
ANISOU 2152 CA  THR  308 3468    1939    5998   225   -1629 -194
ATOM   2153 C   THR  308 10.468  -0.611  54.030 1.000 25.42
ANISOU 2153 C   THR  308 2915    2190    4552   453   -626 -321
ATOM   2154 O   THR  308 9.523   -0.768  54.787 1.000 30.10
ANISOU 2154 O   THR  308 4042    3482    3912   614   -217 -125
ATOM   2155 CB  THR  308 12.581  0.531   54.688 1.000 26.09
ANISOU 2155 CB  THR  308 2701    3586    3626   242   -361 -456
ATOM   2156 OG1 THR  308 12.140  0.751   56.028 1.000 32.90
ANISOU 2156 OG1 THR  308 4146    4188    4167   504   745  -495
ATOM   2157 CG2 THR  308 13.577  1.594   54.256 1.000 31.43
ANISOU 2157 CG2 THR  308 3193    4702    4047   -577  -132 -538
ATOM   2158 N   SER  309 10.850  -1.591  53.217 1.000 24.73
ANISOU 2158 N   SER  309 2934    2092    4370   94 -574  -391
ATOM   2159 CA  SER  309 10.199  -2.897  53.230 1.000 25.19
ANISOU 2159 CA  SER  309 3793    2464    3316   -485  451  -230
ATOM   2160 C   SER  309 10.466  -3.691  54.512 1.000 24.06
ANISOU 2160 C   SER  309 2360    2888    3893   302   107  3 5
ATOM   2161 O   SER  309 11.565  -3.621  55.084 1.000 34.54
ANISOU 2161 O   SER  309 3626    2131    7366   -76   -1944 - 34
ATOM   2162 CB  SER  309 10.639  -3.700  52.012 1.000 26.52
ANISOU 2162 CB  SER  309 3970    2159    3948   167   580  -366
ATOM   2163 OG  SER  309 10.217  -5.039  52.148 1.000 26.34
ANISOU 2163 OG  SER  309 3198    2207    4604   156   -844 -260
ATOM   2164 N   LYS  310 9.494   -4.458  54.961 1.000 24.99
ANISOU 2164 N   LYS  310 3172    2459    3864   160   262  3 6 6
ATOM   2165 CA  LYS  310 9.651   -5.339  56.125 1.000 28.38
ANISOU 2165 CA  LYS  310 4191    3167    3427   764   278  2 8 1
ATOM   2166 C   LYS  310 9.941   -6.768  55.711 1.000 26.07
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ANISOU	2166	C	LYS	310	3371	2687	3846	168	-290	577
ATOM	2167	O	LYS	310	10.150	-7.684	56.515	1.000	33.48	
ANISOU	2167	O	LYS	310	5267	3056	4400	-66	-450	1073
ATOM	2168	CB	LYS	310	8.299	-5.367	56.858	1.000	37.77	
ANISOU	2168	CB	LYS	310	5736	4695	3921	299	1818	1 8
ATOM	2169	CG	LYS	310	8.014	-4.214	57.806	1.000	40.55	
ANISOU	2169	CG	LYS	310	6395	4716	4295	1525	1524	101
ATOM	2170	CD	LYS	310	6.798	-4.587	58.649	1.000	44.24	
ANISOU	2170	CD	LYS	310	9091	4224	3495	1053	2816	584
ATOM	2171	CE	LYS	310	6.722	-6.109	58.818	1.000	59.12	
ANISOU	2171	CE	LYS	310	9281	4577	8606	766	-82	2478
ATOM	2172	NZ	LYS	310	6.088	-6.563	60.089	1.000	55.80	
ANISOU	2172	NZ	LYS	310	4884	5742	10577	287	-947	4796
ATOM	2173	N	ALA	311	9.896	-7.030	54.410	1.000	22.45	
ANISOU	2173	N	ALA	311	2190	2402	3939	10	52	269
ATOM	2174	CA	ALA	311	10.360	-8.369	53.972	1.000	31.89	
ANISOU	2174	CA	ALA	311	3771	2594	5753	434	-516	-421
ATOM	2175	C	ALA	311	11.909	-8.459	53.833	1.000	23.30	
ANISOU	2175	C	ALA	311	3907	2328	2616	1393	-593	112
ATOM	2176	CB	ALA	311	9.619	-8.665	52.674	1.000	27.94	
ANISOU	2176	CB	ALA	311	2407	2878	5329	-355	542	-672
ATOM	2177	OW	HOH	501	-6.477	10.237	44.256	1.000	15.66	
ATOM	2178	OW	HOH	502	-9.349	16.189	51.010	1.000	19.26	
ATOM	2179	OW	HOH	503	-1.489	3.653	34.560	1.000	15.78	
ATOM	2180	OW	HOH	504	-10.499	18.731	50.182	1.000	16.19	
ATOM	2181	OW	HOH	505	-8.612	16.958	47.640	1.000	17.30	
ATOM	2182	OW	HOH	506	-10.255	20.839	42.881	1.000	19.05	
ATOM	2183	OW	HOH	507	2.096	1.076	32.810	1.000	29.32	
ATOM	2184	OW	HOH	508	-0.284	4.743	41.885	1.000	13.93	
ATOM	2185	OW	HOH	509	-8.525	18.553	42.416	1.000	21.33	
ATOM	2186	OW	HOH	510	3.165	2.604	43.488	1.000	24.59	
ATOM	2187	OW	HOH	511	-6.282	19.386	52.341	1.000	18.98	
ATOM	2188	OW	HOH	512	-6.826	24.638	46.833	1.000	21.77	
ATOM	2189	OW	HOH	513	10.510	-4.344	46.092	1.000	25.88	
ATOM	2190	OW	HOH	514	-0.806	16.964	40.372	1.000	16.54	
ATOM	2191	OW	HOH	515	-1.269	18.855	42.411	1.000	15.76	
ATOM	2192	OW	HOH	516	14.277	-5.146	40.175	1.000	15.53	
ATOM	2193	OW	HOH	517	-0.123	21.538	40.640	1.000	17.22	
ATOM	2194	OW	HOH	518	13.131	-0.967	51.791	1.000	31.17	
ATOM	2195	OW	HOH	519	11.009	2.875	45.599	1.000	20.20	
ATOM	2196	OW	HOH	520	5.789	13.543	45.996	1.000	17.36	
ATOM	2197	OW	HOH	521	2.168	19.767	55.925	1.000	20.41	
ATOM	2198	OW	HOH	522	8.487	15.960	34.949	1.000	15.40	
ATOM	2199	OW	HOH	523	10.794	12.697	29.921	1.000	19.99	
ATOM	2200	OW	HOH	524	-11.722	19.112	44.516	1.000	19.82	
ATOM	2201	OW	HOH	525	1.672	-2.081	35.124	1.000	16.29	
ATOM	2202	OW	HOH	526	9.651	15.283	32.342	1.000	20.37	
ATOM	2203	OW	HOH	527	28.749	31.187	52.019	1.000	18.53	
ATOM	2204	OW	HOH	528	15.326	11.252	32.041	1.000	19.60	
ATOM	2205	OW	HOH	529	26.897	26.984	52.035	1.000	19.86	
ATOM	2206	OW	HOH	530	13.528	11.592	50.915	1.000	16.17	
ATOM	2207	OW	HOH	531	25.631	32.409	52.682	1.000	19.20	
ATOM	2208	OW	HOH	532	18.287	6.835	52.185	1.000	18.49	
ATOM	2209	OW	HOH	533	12.635	29.035	39.395	1.000	18.09	
ATOM	2210	OW	HOH	534	10.797	31.968	45.659	1.000	20.66	
ATOM	2211	OW	HOH	535	10.167	24.890	33.567	1.000	19.12	
ATOM	2212	OW	HOH	536	23.530	24.122	58.531	1.000	20.39	
ATOM	2213	OW	HOH	537	23.358	12.639	35.292	1.000	22.61	
ATOM	2214	OW	HOH	538	25.879	28.699	50.264	1.000	19.44	
ATOM	2215	OW	HOH	539	11.674	16.559	30.502	1.000	18.57	
ATOM	2216	OW	HOH	540	18.515	27.775	40.042	1.000	22.23	

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ATOM   2217 OW  HOH  541 21.233  20.367  33.996 1.000 21.45
ATOM   2218 OW  HOH  542 22.826  32.643  53.094 1.000 19.38
ATOM   2219 OW  HOH  543 19.670  22.387  35.310 1.000 20.05
ATOM   2220 OW  HOH  544 -13.591 21.996  61.494 1.000 49.93
ATOM   2221 OW  HOH  545 21.295  11.783  55.080 1.000 20.04
ATOM   2222 OW  HOH  546 5.431   2.533   51.677 1.000 28.11
ATOM   2223 OW  HOH  547 17.311  25.489  32.148 1.000 24.38
ATOM   2224 OW  HOH  548 17.427  7.744   33.008 1.000 20.78
ATOM   2225 OW  HOH  549 11.656  23.874  58.194 1.000 23.39
ATOM   2226 OW  HOH  550 8.037   14.987  53.326 1.000 33.52
ATOM   2227 OW  HOH  551 1.354   14.574  33.889 1.000 21.05
ATOM   2228 OW  HOH  552 11.203  20.116  63.686 1.000 24.59
ATOM   2229 OW  HOH  553 2.671   21.240  34.245 1.000 34.51
ATOM   2230 OW  HOH  554 6.339   19.832  30.751 1.000 26.36
ATOM   2231 OW  HOH  555 26.611  24.519  55.570 1.000 21.22
ATOM   2232 OW  HOH  556 27.669  17.156  53.039 1.000 25.86
ATOM   2233 OW  HOH  557 -14.392 19.977  44.154 1.000 25.03
ATOM   2234 OW  HOH  558 14.828  32.652  51.443 1.000 25.23
ATOM   2235 OW  HOH  559 17.937  7.207   54.915 1.000 20.59
ATOM   2236 OW  HOH  560 10.729  -8.875  31.499 1.000 24.65
ATOM   2237 OW  HOH  561 6.455   2.298   42.613 1.000 22.74
ATOM   2238 OW  HOH  562 13.784  31.245  44.166 1.000 27.75
ATOM   2239 OW  HOH  563 17.292  33.470  53.556 1.000 25.28
ATOM   2240 OW  HOH  564 11.210  1.109   49.697 1.000 23.33
ATOM   2241 OW  HOH  565 -11.339 25.246  41.370 1.000 26.08
ATOM   2242 OW  HOH  566 20.363  -8.375  38.242 1.000 30.07
ATOM   2243 OW  HOH  567 3.890   24.604  35.837 1.000 25.86
ATOM   2244 OW  HOH  568 5.334   11.875  43.937 1.000 25.45
ATOM   2245 OW  HOH  569 7.861   22.385  64.046 1.000 28.98
ATOM   2246 OW  HOH  570 7.754   -1.508  30.848 1.000 24.72
ATOM   2247 OW  HOH  571 6.297   3.583   28.471 1.000 33.06
ATOM   2248 OW  HOH  572 -15.790 28.800  51.855 1.000 30.09
ATOM   2249 OW  HOH  573 -5.388  20.310  38.883 1.000 23.64
ATOM   2250 OW  HOH  574 17.657  21.059  29.053 1.000 24.31
ATOM   2251 OW  HOH  575 8.763   20.920  66.102 1.000 24.81
ATOM   2252 OW  HOH  576 10.135  27.617  58.357 1.000 25.12
ATOM   2253 OW  HOH  577 7.795   1.060   29.730 1.000 29.00
ATOM   2254 OW  HOH  578 22.601  19.580  61.946 1.000 28.66
ATOM   2255 OW  HOH  579 8.859   4.744   27.898 1.000 26.12
ATOM   2256 OW  HOH  580 4.937   3.932   48.882 1.000 26.29
ATOM   2257 OW  HOH  581 17.096  5.891   35.057 1.000 23.31
ATOM   2258 OW  HOH  582 -16.337 31.047  64.719 1.000 54.01
ATOM   2259 OW  HOH  583 7.652   24.826  52.106 1.000 27.23
ATOM   2260 OW  HOH  584 7.174   24.915  29.292 1.000 26.60
ATOM   2261 OW  HOH  585 23.452  10.614  55.439 1.000 26.42
ATOM   2262 OW  HOH  586 12.640  26.413  58.676 1.000 27.15
ATOM   2263 OW  HOH  587 6.204   21.166  62.094 1.000 24.65
ATOM   2264 OW  HOH  588 2.385   0.810   37.616 1.000 19.92
ATOM   2265 OW  HOH  589 32.930  28.236  45.738 1.000 38.29
ATOM   2266 OW  HOH  590 -12.045 28.716  45.065 1.000 30.46
ATOM   2267 OW  HOH  591 0.219   13.612  36.120 1.000 27.12
ATOM   2268 OW  HOH  592 -2.525  3.881   43.344 1.000 26.67
ATOM   2269 OW  HOH  593 7.533   13.297  48.055 1.000 19.59
ATOM   2270 OW  HOH  594 -1.575  28.355  42.057 1.000 25.53
ATOM   2271 OW  HOH  595 11.209  -1.188  46.425 1.000 22.12
ATOM   2272 OW  HOH  596 5.684   -7.000  28.451 1.000 27.97
ATOM   2273 OW  HOH  597 28.868  19.406  51.825 1.000 27.72
ATOM   2274 OW  HOH  598 13.432  2.493   57.904 1.000 31.12
ATOM   2275 OW  HOH  599 8.196   7.483   27.148 1.000 29.99
ATOM   2276 OW  HOH  600 20.809  19.088  63.369 1.000 36.86
ATOM   2277 OW  HOH  601 21.352  10.656  34.614 1.000 30.60
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ATOM   2278 OW  HOH  602 2.891   7.196   30.899 1.000 25.41
ATOM   2279 OW  HOH  603 8.260   26.496  34.561 1.000 35.71
ATOM   2280 OW  HOH  604 22.300  13.959  31.378 1.000 32.53
ATOM   2281 OW  HOH  605 15.689  35.750  48.870 1.000 31.17
ATOM   2282 OW  HOH  606 7.219   15.638  30.914 1.000 27.80
ATOM   2283 OW  HOH  607 -3.237  14.604  47.092 1.000 20.96
ATOM   2284 OW  HOH  608 17.543  10.581  33.561 1.000 23.51
ATOM   2285 OW  HOH  609 -1.899  36.370  44.261 1.000 32.64
ATOM   2286 OW  HOH  610 26.095  14.431  43.803 1.000 19.19
ATOM   2287 OW  HOH  611 27.664  13.183  41.954 1.000 26.48
ATOM   2288 OW  HOH  612 4.302   34.604  49.981 1.000 24.70
ATOM   2289 OW  HOH  613 -15.580 27.012  46.728 1.000 42.45
ATOM   2290 OW  HOH  614 1.615   35.544  50.347 1.000 23.78
ATOM   2291 OW  HOH  615 -10.137 34.259  49.033 1.000 23.94
ATOM   2292 OW  HOH  616 26.084  6.502   57.657 1.000 39.32
ATOM   2293 OW  HOH  617 -15.962 20.656  46.340 1.000 25.94
ATOM   2294 OW  HOH  618 6.113   29.517  40.143 1.000 29.43
ATOM   2295 OW  HOH  619 19.797  4.627   51.313 1.000 27.15
ATOM   2296 OW  HOH  620 -1.748  11.315  48.716 1.000 21.83
ATOM   2297 OW  HOH  621 11.099  34.289  44.259 1.000 27.15
ATOM   2298 OW  HOH  622 28.352  14.351  37.877 1.000 41.48
ATOM   2299 OW  HOH  623 -2.826  36.968  57.149 1.000 32.75
ATOM   2300 OW  HOH  624 16.983  9.258   29.962 1.000 32.82
ATOM   2301 OW  HOH  625 16.780  29.213  38.384 1.000 27.96
ATOM   2302 OW  HOH  626 1.632   17.213  33.689 1.000 23.17
ATOM   2303 OW  HOH  627 33.536  23.640  45.028 1.000 41.91
ATOM   2304 OW  HOH  628 23.821  6.059   50.174 1.000 34.22
ATOM   2305 OW  HOH  629 3.482   2.785   46.751 1.000 39.07
ATOM   2306 OW  HOH  630 20.218  24.803  60.918 1.000 50.12
ATOM   2307 OW  HOH  631 3.366   16.272  30.698 1.000 31.50
ATOM   2308 OW  HOH  632 18.871  11.791  31.384 1.000 30.78
ATOM   2309 OW  HOH  633 4.455   25.782  58.823 1.000 32.14
ATOM   2310 OW  HOH  634 24.721  5.202   40.319 1.000 40.13
ATOM   2311 OW  HOH  635 19.623  35.238  43.466 1.000 50.48
ATOM   2312 OW  HOH  636 22.789  26.242  60.797 1.000 26.58
ATOM   2313 OW  HOH  637 7.008   -4.809  54.039 1.000 33.89
ATOM   2314 OW  HOH  638 -15.821 18.362  42.559 1.000 29.61
ATOM   2315 OW  HOH  639 -11.847 15.711  52.841 1.000 25.21
ATOM   2316 OW  HOH  640 -1.948  13.411  35.401 1.000 30.41
ATOM   2317 OW  HOH  641 -14.293 21.937  42.145 1.000 27.58
ATOM   2318 OW  HOH  642 18.216  20.839  66.863 1.000 31.23
ATOM   2319 OW  HOH  643 9.836   36.288  48.178 1.000 44.21
ATOM   2320 OW  HOH  644 3.510   16.168  66.253 1.000 33.82
ATOM   2321 OW  HOH  645 7.571   33.398  41.687 1.000 37.96
ATOM   2322 OW  HOH  646 0.780   21.844  36.729 1.000 31.71
ATOM   2323 OW  HOH  647 21.244  -2.321  35.579 1.000 32.40
ATOM   2324 OW  HOH  648 3.027   25.244  69.907 1.000 36.84
ATOM   2325 OW  HOH  649 1.129   25.273  66.516 1.000 35.42
ATOM   2326 OW  HOH  650 14.646  7.560   60.327 1.000 46.42
ATOM   2327 OW  HOH  651 -8.287  26.381  37.998 1.000 29.17
ATOM   2328 OW  HOH  652 10.153  23.548  67.703 1.000 31.50
ATOM   2329 OW  HOH  653 28.906  22.258  38.969 1.000 32.66
ATOM   2330 OW  HOH  654 13.568  -4.482  31.517 1.000 26.94
ATOM   2331 OW  HOH  655 -12.635 17.106  55.637 1.000 26.85
ATOM   2332 OW  HOH  656 2.698   5.770   50.702 1.000 29.05
ATOM   2333 OW  HOH  657 -1.384  7.487   46.512 1.000 36.52
ATOM   2334 OW  HOH  658 3.880   19.246  31.498 1.000 31.50
ATOM   2335 OW  HOH  659 -1.400  31.406  64.001 1.000 56.62
ATOM   2336 OW  HOH  660 11.416  23.260  65.229 1.000 32.69
ATOM   2337 OW  HOH  661 15.994  14.673  25.680 1.000 36.46
ATOM   2338 OW  HOH  662 28.572  21.242  53.423 1.000 39.06
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ATOM   2339 OW  HOH  663 19.354  0.465   27.273 1.000 44.56
ATOM   2340 OW  HOH  664 24.969  27.026  38.838 1.000 35.41
ATOM   2341 OW  HOH  665 24.294  7.488   55.914 1.000 32.97
ATOM   2342 OW  HOH  666 19.540  7.882   31.178 1.000 30.04
ATOM   2343 OW  HOH  667 -9.236  32.988  57.241 1.000 39.20
ATOM   2344 OW  HOH  668 2.098   18.351  67.496 1.000 38.88
ATOM   2345 OW  HOH  669 11.390  3.245   56.270 1.000 37.56
ATOM   2346 OW  HOH  670 -21.413 24.449  52.026 1.000 44.66
ATOM   2347 OW  HOH  671 -14.575 19.220  55.240 1.000 30.91
ATOM   2348 OW  HOH  672 32.112  25.958  43.051 1.000 33.34
ATOM   2349 OW  HOH  673 -15.050 31.151  53.232 1.000 34.71
ATOM   2350 OW  HOH  674 2.941   -1.607  30.245 1.000 34.63
ATOM   2351 OW  HOH  675 26.951  14.544  34.757 1.000 49.17
ATOM   2352 OW  HOH  676 14.707  30.669  39.386 1.000 30.55
ATOM   2353 OW  HOH  677 5.203   18.009  68.080 1.000 43.41
ATOM   2354 OW  HOH  678 14.151  7.965   26.591 1.000 38.80
ATOM   2355 OW  HOH  679 24.470  24.261  41.443 1.000 31.28
ATOM   2356 OW  HOH  680 17.540  2.410   28.478 1.000 34.31
ATOM   2357 OW  HOH  681 25.992  20.593  34.326 1.000 39.66
ATOM   2358 OW  HOH  682 13.802  35.357  44.421 1.000 34.06
ATOM   2359 OW  HOH  683 1.087   2.355   45.456 1.000 35.39
ATOM   2360 OW  HOH  684 22.443  34.538  42.053 1.000 33.55
ATOM   2361 OW  HOH  685 4.419   4.720   27.356 1.000 48.02
ATOM   2362 OW  HOH  686 -15.830 34.507  51.877 1.000 50.63
ATOM   2363 OW  HOH  687 -15.217 29.490  48.887 1.000 33.54
ATOM   2364 OW  HOH  688 36.808  21.183  46.206 1.000 44.97
ATOM   2365 OW  HOH  689 3.756   1.312   29.272 1.000 35.16
ATOM   2366 OW  HOH  690 18.802  13.646  27.901 1.000 30.08
ATOM   2367 OW  HOH  691 6.997   17.521  29.313 1.000 47.70
ATOM   2368 OW  HOH  692 13.725  16.327  69.105 1.000 36.97
ATOM   2369 OW  HOH  693 22.369  22.161  60.503 1.000 44.09
ATOM   2370 OW  HOH  694 -5.429  31.620  42.219 1.000 33.40
ATOM   2371 OW  HOH  695 19.351  23.082  30.744 1.000 34.21
ATOM   2372 OW  HOH  696 6.897   22.414  29.376 1.000 36.59
ATOM   2373 OW  HOH  697 28.700  7.809   57.304 1.000 38.35
ATOM   2374 OW  HOH  698 3.224   0.679   39.819 1.000 24.13
ATOM   2375 OW  HOH  699 -4.634  33.717  62.593 1.000 32.26
ATOM   2376 OW  HOH  700 32.423  17.018  43.200 1.000 43.20
ATOM   2377 OW  HOH  701 12.119  25.228  68.342 1.000 39.95
ATOM   2378 OW  HOH  702 9.307   16.477  28.976 1.000 31.75
ATOM   2379 OW  HOH  703 -11.313 34.067  46.117 1.000 49.40
ATOM   2380 OW  HOH  704 7.774   31.390  65.371 1.000 39.12
ATOM   2381 OW  HOH  705 24.764  7.530   36.802 1.000 38.55
ATOM   2382 OW  HOH  706 -22.095 25.669  59.047 1.000 36.71
ATOM   2383 OW  HOH  707 14.509  9.840   68.854 1.000 50.38
ATOM   2384 OW  HOH  708 -10.129 28.722  42.036 1.000 38.92
ATOM   2385 OW  HOH  709 29.011  34.910  48.390 1.000 35.29
ATOM   2386 OW  HOH  710 15.822  31.612  42.021 1.000 33.61
ATOM   2387 OW  HOH  711 -1.996  17.676  33.645 1.000 49.57
ATOM   2388 OW  HOH  712 10.216  17.748  26.015 1.000 41.04
ATOM   2389 OW  HOH  713 23.535  29.642  37.371 1.000 43.47
ATOM   2390 OW  HOH  714 20.488  -7.214  35.599 1.000 45.99
ATOM   2391 OW  HOH  715 11.411  10.149  25.081 1.000 41.63
ATOM   2392 OW  HOH  716 19.329  -4.258  34.139 1.000 42.50
ATOM   2393 OW  HOH  717 13.688  26.799  66.321 1.000 43.74
ATOM   2394 OW  HOH  718 -10.751 33.064  54.747 1.000 40.47
ATOM   2395 OW  HOH  719 13.800  18.258  70.756 1.000 34.54
ATOM   2396 OW  HOH  720 17.151  5.815   28.003 1.000 40.80
ATOM   2397 OW  HOH  721 0.000   0.000   36.691 0.330 27.42
ATOM   2398 OW  HOH  722 0.000   0.000   41.559 0.330 37.77
ATOM   2399 OW  HOH  723 15.314  7.549   28.791 1.000 36.24
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ATOM	2400	OW	HOH	724	-1.663	19.944	39.196	1.000	33.87
ATOM	2401	OW	HOH	725	19.289	24.195	33.321	1.000	32.28
ATOM	2402	OW	HOH	726	0.000	0.000	31.798	0.330	50.38
ATOM	2403	OW	HOH	727	-1.223	38.165	59.229	1.000	31.24
ATOM	2404	OW	HOH	728	22.035	38.254	45.742	1.000	48.21
ATOM	2405	OW	HOH	729	28.388	16.248	63.044	1.000	31.59
ATOM	2406	OW	HOH	730	0.000	0.000	45.995	0.330	36.14
ATOM	2407	OW	HOH	731	2.984	29.007	40.091	1.000	36.08
ATOM	2408	OW	HOH	732	5.297	15.835	27.318	1.000	41.53
ATOM	2409	OW	HOH	733	17.347	10.778	27.373	1.000	35.27
ATOM	2410	OW	HOH	734	29.417	14.607	53.127	1.000	40.12
ATOM	2411	OW	HOH	735	4.222	-8.636	27.012	1.000	35.22
ATOM	2412	OW	HOH	736	-9.949	17.712	62.813	1.000	34.43
ATOM	2413	OW	HOH	737	13.960	-10.203	55.259	1.000	31.79
ATOM	2414	OW	HOH	738	11.831	-1.522	49.308	1.000	25.22
ATOM	2415	OW	HOH	739	2.896	4.247	29.596	1.000	38.64
ATOM	2416	OW	HOH	740	10.959	13.759	25.528	1.000	61.86
ATOM	2417	OW	HOH	741	0.864	17.227	30.557	1.000	50.71
ATOM	2418	OW	HOH	742	31.755	18.949	52.065	1.000	40.48
ATOM	2419	OW	HOH	743	21.678	-0.485	28.218	1.000	43.23
ATOM	2420	OW	HOH	744	10.583	16.397	75.211	1.000	45.04
ATOM	2421	OW	HOH	745	7.480	7.996	78.287	1.000	57.64
ATOM	2422	OW	HOH	746	24.067	35.122	40.297	1.000	41.95
ATOM	2423	OW	HOH	747	7.804	10.269	78.332	1.000	49.63
ATOM	2424	OW	HOH	748	22.131	40.645	45.806	1.000	49.69
ATOM	2425	OW	HOH	749	14.850	-4.647	33.872	1.000	42.88
ATOM	2426	OW	HOH	750	-12.930	32.504	55.211	1.000	37.15
ATOM	2427	OW	HOH	751	-4.832	35.986	43.333	1.000	44.39
ATOM	2428	OW	HOH	752	19.834	33.566	56.449	1.000	31.56
ATOM	2429	OW	HOH	753	3.363	22.310	29.844	1.000	42.02
ATOM	2430	OW	HOH	754	25.594	4.030	34.174	1.000	51.90
ATOM	2431	OW	HOH	755	28.036	35.859	46.448	1.000	39.50
ATOM	2432	OW	HOH	756	-12.951	16.294	61.787	1.000	40.94
ATOM	2433	OW	HOH	757	-10.870	26.452	38.737	1.000	44.85
ATOM	2434	OW	HOH	758	13.216	12.896	70.729	1.000	63.42
ATOM	2435	OW	HOH	759	-0.403	21.161	74.990	1.000	38.96
ATOM	2436	OW	HOH	760	-7.025	32.526	64.316	1.000	39.64
ATOM	2437	OW	HOH	761	-15.459	19.739	58.090	1.000	40.84
ATOM	2438	OW	HOH	762	-4.964	36.577	59.068	1.000	48.64
ATOM	2439	OW	HOH	763	26.807	35.717	50.036	1.000	43.54
ATOM	2440	OW	HOH	764	19.542	7.083	65.538	1.000	41.41
ATOM	2441	OW	HOH	765	3.709	35.837	42.709	1.000	33.78
ATOM	2442	OW	HOH	766	0.431	33.688	40.172	1.000	36.91
ATOM	2443	OW	HOH	767	18.620	5.064	64.617	1.000	45.76
ATOM	2444	OW	HOH	768	35.526	19.792	41.322	1.000	52.54
ATOM	2445	OW	HOH	769	19.671	7.789	67.717	1.000	43.44
ATOM	2446	OW	HOH	770	3.562	12.048	26.149	1.000	40.08
ATOM	2447	OW	HOH	771	20.245	35.637	53.927	1.000	52.16
ATOM	2448	OW	HOH	772	-20.588	25.640	61.573	1.000	58.60
ATOM	2449	OW	HOH	773	1.556	37.342	52.171	1.000	36.23
ATOM	2450	OW	HOH	774	8.340	0.668	49.382	1.000	107.24
ATOM	2451	OW	HOH	775	27.160	2.372	34.466	1.000	59.84
ATOM	2452	OW	HOH	776	6.575	19.271	25.545	1.000	36.68

ATOM	2453	OW	HOH	777	-17.605	29.205	62.661	1.000	56.83
ATOM	2454	OW	HOH	778	7.616	6.902	24.722	1.000	61.34
ATOM	2455	OW	HOH	779	19.749	10.700	68.006	1.000	65.22
ATOM	2456	W	HOH	780	7.281	-5.270	50.090	1.000	50.00
ATOM	2457	W	HOH	781	-6.809	28.483	40.515	1.000	50.00
ATOM	2458	W	HOH	782	9.990	17.263	38.636	1.000	50.00
ATOM	2459	W	HOH	783	5.767	-2.331	28.939	1.000	50.00
ATOM	2460	W	HOH	784	11.694	-0.118	24.984	1.000	50.00
ATOM	2461	W	HOH	785	24.442	7.952	47.994	1.000	50.00
ATOM	2462	W	HOH	786	14.251	36.889	46.491	1.000	50.00
ATOM	2463	W	HOH	787	5.759	26.477	33.851	1.000	50.00
ATOM	2464	W	HOH	788	-11.816	22.606	40.795	1.000	50.00
ATOM	2465	W	HOH	789	-2.531	5.579	45.829	1.000	50.00
ATOM	2466	W	HOH	790	-13.002	32.034	46.612	1.000	50.00
ATOM	2467	W	HOH	791	2.230	3.555	48.985	1.000	50.00
ATOM	2468	W	HOH	792	9.397	13.464	28.121	1.000	50.00
ATOM	2469	W	HOH	793	28.257	10.442	42.781	1.000	50.00
ATOM	2470	W	HOH	794	4.652	17.944	59.241	1.000	50.00
ATOM	2471	W	HOH	795	5.977	15.287	79.554	1.000	50.00
ATOM	2472	W	HOH	796	30.501	11.852	47.616	1.000	50.00
ATOM	2473	W	HOH	797	5.625	14.258	54.367	1.000	50.00
ATOM	2474	W	HOH	798	23.942	20.228	33.277	1.000	50.00
ATOM	2475	W	HOH	799	10.164	14.642	58.997	1.000	50.00
ATOM	2476	W	HOH	800	7.807	31.943	52.999	1.000	50.00
ATOM	2477	W	HOH	801	-23.377	9.361	34.817	1.000	50.00
ATOM	2478	W	HOH	802	21.193	9.722	32.004	1.000	50.00
ATOM	2479	W	HOH	803	34.928	14.644	46.038	1.000	50.00
ATOM	2480	W	HOH	804	29.073	16.684	34.445	1.000	50.00
ATOM	2481	W	HOH	805	7.008	-2.049	51.872	1.000	50.00
ATOM	2482	W	HOH	806	25.363	7.860	45.531	1.000	50.00
ATOM	2483	W	HOH	807	30.704	8.207	55.971	1.000	50.00
ATOM	2484	W	HOH	808	33.072	24.900	40.599	1.000	50.00
ATOM	2485	W	HOH	809	-15.577	19.225	63.152	1.000	50.00
ATOM	2486	W	HOH	810	6.072	18.137	23.603	1.000	50.00
ATOM	2487	W	HOH	811	-7.214	39.940	55.639	1.000	50.00
ATOM	2488	W	HOH	812	5.509	18.517	74.919	1.000	50.00
ATOM	2489	W	HOH	813	33.845	9.908	56.672	1.000	50.00
ATOM	2490	W	HOH	814	0.421	35.779	42.931	1.000	50.00
ATOM	2491	W	HOH	815	35.282	21.705	48.656	1.000	50.00
ATOM	2492	W	HOH	816	39.344	22.173	46.871	1.000	50.00
ATOM	2493	W	HOH	817	-5.192	39.820	60.056	1.000	50.00
ATOM	2494	W	HOH	818	30.199	13.039	33.383	1.000	50.00
ATOM	2495	W	HOH	819	-4.860	36.454	61.731	1.000	50.00
ATOM	2496	W	HOH	820	-14.599	17.407	58.382	1.000	50.00
ATOM	2497	W	HOH	821	1.340	-0.111	41.711	0.500	50.00
ATOM	2498	W	HOH	822	34.512	23.218	52.108	1.000	50.00
ATOM	2499	W	HOH	823	32.136	12.571	52.190	1.000	50.00
ATOM	2500	W	HOH	824	13.525	-6.549	29.838	1.000	50.00
ATOM	2501	W	HOH	825	6.072	-4.141	27.534	1.000	50.00

STRUCTURE B

ATOM	1	CB	MET	1	31.030	11.882	57.066	1.000	50.96
ANISOU	1	CB	MET	1	5663	3892	9809	1113	-2217 -554
ATOM	2	CG	MET	1	30.206	12.690	56.086	1.000	51.63
ANISOU	2	CG	MET	1	6595	3775	9246	691	-1891 169
ATOM	3	SD	MET	1	28.694	11.848	55.559	1.000	40.50
ANISOU	3	SD	MET	1	7003	3962	4424	833	-1535 -460
ATOM	4	CE	MET	1	27.852	11.584	57.120	1.000	45.32
ANISOU	4	CE	MET	1	8632	3912	4677	-239	-653 -1702
ATOM	5	C	MET	1	31.587	13.367	58.999	1.000	52.14
ANISOU	5	C	MET	1	6204	4752	8854	287	-2128 -63
ATOM	6	O	MET	1	31.239	12.847	60.058	1.000	52.92
ANISOU	6	O	MET	1	7381	5242	7483	1417	-4224 519
ATOM	7	N	MET	1	33.170	11.646	58.275	1.000	57.78
ANISOU	7	N	MET	1	4533	6034	11388	34	-1912 -811
ATOM	8	CA	MET	1	32.156	12.587	57.819	1.000	54.62
ANISOU	8	CA	MET	1	6441	4752	9560	137	-2012 -617
ATOM	9	N	ASP	2	31.485	14.679	58.792	1.000	43.52
ANISOU	9	N	ASP	2	3460	4866	8210	474	-2350 4 7
ATOM	10	CA	ASP	2	30.759	15.471	59.796	1.000	41.69
ANISOU	10	CA	ASP	2	4439	4678	6722	-309	-2603 -31
ATOM	11	CB	ASP	2	31.206	16.912	59.644	1.000	37.89
ANISOU	11	CB	ASP	2	3805	4768	5822	-304	-3473 266
ATOM	12	CG	ASP	2	30.219	17.958	60.121	1.000	39.59
ANISOU	12	CG	ASP	2	4511	4616	5916	15	-3218 589
ATOM	13	OD1	ASP	2	29.325	17.637	60.933	1.000	45.10
ANISOU	13	OD1	ASP	2	5866	4689	6581	-553	-1950 -625
ATOM	14	OD2	ASP	2	30.363	19.121	59.663	1.000	42.05
ANISOU	14	OD2	ASP	2	5994	4341	5643	-465	-3788 145
ATOM	15	C	ASP	2	29.275	15.213	59.556	1.000	33.84
ANISOU	15	C	ASP	2	4131	3634	5094	-59	-1682 -122
ATOM	16	O	ASP	2	28.901	15.176	58.379	1.000	29.25
ANISOU	16	O	ASP	2	2232	4393	4489	658	-390 -615
ATOM	17	N	THR	3	28.467	15.029	60.597	1.000	29.41
ANISOU	17	N	THR	3	4731	2636	3807	907	-2076 -284
ATOM	18	CA	THR	3	27.046	14.764	60.421	1.000	28.55
ANISOU	18	CA	THR	3	4602	2494	3753	597	-1006 -390
ATOM	19	CB	THR	3	26.447	13.762	61.414	1.000	36.51
ANISOU	19	CB	THR	3	7170	2209	4495	-791	-1996 5 2
ATOM	20	OG1	THR	3	26.629	14.220	62.758	1.000	42.45
ANISOU	20	OG1	THR	3	9519	2620	3989	-920	-1251 383
ATOM	21	CG2	THR	3	27.153	12.412	61.315	1.000	50.26
ANISOU	21	CG2	THR	3	9604	1863	7630	-602	-733 -333
ATOM	22	C	THR	3	26.240	16.061	60.553	1.000	29.01
ANISOU	22	C	THR	3	4535	2548	3939	738	-1079 9 9
ATOM	23	O	THR	3	25.041	16.044	60.827	1.000	35.82
ANISOU	23	O	THR	3	5149	2485	5976	390	524 -1246
ATOM	24	N	THR	4	26.928	17.181	60.332	1.000	24.98
ANISOU	24	N	THR	4	3874	2456	3162	542	-2040 -986
ATOM	25	CA	THR	4	26.214	18.465	60.327	1.000	23.97
ANISOU	25	CA	THR	4	3437	2426	3244	344	-1563 -375
ATOM	26	CB	THR	4	27.183	19.650	60.408	1.000	26.77
ANISOU	26	CB	THR	4	2636	2429	5105	651	-988 -923
ATOM	27	OG1	THR	4	28.050	19.484	61.551	1.000	32.62
ANISOU	27	OG1	THR	4	3398	2812	6184	195	-2081 -1134
ATOM	28	CG2	THR	4	26.429	20.942	60.663	1.000	26.40
ANISOU	28	CG2	THR	4	2373	2692	4967	533	-573 -1570
ATOM	29	C	THR	4	25.325	18.577	59.097	1.000	21.64
ANISOU	29	C	THR	4	3090	2760	2374	368	-750 -20
ATOM	30	O	THR	4	25.738	18.264	57.980	1.000	21.58
ANISOU	30	O	THR	4	2668	2629	2902	246	-560 -659
ATOM	31	N	VAL	5	24.104	19.049	59.340	1.000	15.88

ANISOU	31	N	VAL	5	2505	2021	1508	-613 -630 -162
ATOM	32	CA	VAL	5	23.211	19.385	58.211	1.000 14.80
ANISOU	32	CA	VAL	5	2463	1893	1266	-594 -473 -87
ATOM	33	CB	VAL	5	21.742	19.402	58.606	1.000 16.09
ANISOU	33	CB	VAL	5	2476	1881	1757	-412 -406 5 0 2
ATOM	34	CG1	VAL	5	20.855	19.846	57.447	1.000 14.91
ANISOU	34	CG1	VAL	5	2468	1859	1337	9 -102 197
ATOM	35	CG2	VAL	5	21.310	17.994	59.074	1.000 21.15
ANISOU	35	CG2	VAL	5	3015	2345	2677	-700 -418 1198
ATOM	36	C	VAL	5	23.639	20.762	57.694	1.000 17.70
ANISOU	36	C	VAL	5	2893	2085	1749	-1137 -713 103
ATOM	37	O	VAL	5	23.532	21.759	58.419	1.000 17.35
ANISOU	37	O	VAL	5	2566	1978	2050	-698 -650 105
ATOM	38	N	PRO	6	24.150	20.845	56.479	1.000 13.23
ANISOU	38	N	PRO	6	1334	1597	2097	-162 -668 409
ATOM	39	CD	PRO	6	24.302	19.770	55.484	1.000 15.56
ANISOU	39	CD	PRO	6	1887	1850	2176	-309 -383 277
ATOM	40	CA	PRO	6	24.667	22.137	56.005	1.000 14.49
ANISOU	40	CA	PRO	6	1332	1740	2432	-218 -536 522
ATOM	41	CB	PRO	6	25.571	21.722	54.847	1.000 18.21
ANISOU	41	CB	PRO	6	2294	1740	2886	-224 130 434
ATOM	42	CG	PRO	6	25.132	20.378	54.409	1.000 20.37
ANISOU	42	CG	PRO	6	2708	2632	2399	-1078 38 -61
ATOM	43	C	PRO	6	23.576	23.091	55.510	1.000 14.59
ANISOU	43	C	PRO	6	1388	1712	2443	-406 -786 698
ATOM	44	O	PRO	6	22.408	22.743	55.295	1.000 13.06
ANISOU	44	O	PRO	6	1298	1547	2118	-283 -596 1 5
ATOM	45	N	THR	7	24.048	24.326	55.313	1.000 14.56
ANISOU	45	N	THR	7	1393	1678	2463	-380 -565 587
ATOM	46	CA	THR	7	23.288	25.428	54.771	1.000 13.28
ANISOU	46	CA	THR	7	1463	1584	1998	-469 -734 440
ATOM	47	CB	THR	7	23.121	26.572	55.799	1.000 14.44
ANISOU	47	CB	THR	7	1927	1652	1905	-348 -1257 329
ATOM	48	OG1	THR	7	22.454	26.102	56.998	1.000 18.44
ANISOU	48	OG1	THR	7	3136	2013	1858	-333 -829 176
ATOM	49	CG2	THR	7	22.290	27.719	55.261	1.000 14.98
ANISOU	49	CG2	THR	7	1390	1788	2513	-213 -727 412
ATOM	50	C	THR	7	23.973	26.005	53.539	1.000 14.62
ANISOU	50	C	THR	7	1144	2200	2212	-355 -693 704
ATOM	51	O	THR	7	25.192	26.257	53.600	1.000 17.21
ANISOU	51	O	THR	7	1284	2515	2738	-641 -840 975
ATOM	52	N	PHE	8	23.211	26.222	52.472	1.000 12.32
ANISOU	52	N	PHE	8	1165	1596	1919	-314 -534 370
ATOM	53	CA	PHE	8	23.692	26.869	51.283	1.000 13.31
ANISOU	53	CA	PHE	8	1554	1531	1971	-60 -295 343
ATOM	54	CB	PHE	8	23.724	25.933	50.067	1.000 13.71
ANISOU	54	CB	PHE	8	1479	1705	2025	-136 -232 234
ATOM	55	CG	PHE	8	24.635	24.746	50.258	1.000 13.68
ANISOU	55	CG	PHE	8	1225	1716	2257	-185 8 155
ATOM	56	CD1	PHE	8	24.147	23.503	50.628	1.000 14.10
ANISOU	56	CD1	PHE	8	1317	1710	2329	-93 231 221
ATOM	57	CD2	PHE	8	26.006	24.882	50.079	1.000 17.52
ANISOU	57	CD2	PHE	8	1239	2282	3134	-234 -56 917
ATOM	58	CE1	PHE	8	24.984	22.420	50.812	1.000 15.39
ANISOU	58	CE1	PHE	8	1473	1878	2497	-11 242 481
ATOM	59	CE2	PHE	8	26.840	23.807	50.271	1.000 17.73
ANISOU	59	CE2	PHE	8	1179	2259	3301	-157 -143 423
ATOM	60	CZ	PHE	8	26.348	22.567	50.654	1.000 17.12
ANISOU	60	CZ	PHE	8	1310	2437	2757	24 -382 978
ATOM	61	C	PHE	8	22.821	28.073	50.909	1.000 12.76
ANISOU	61	C	PHE	8	1401	1513	1935	-164 -145 442

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ATOM     62    O    PHE    8     21.602   28.033   51.079  1.000 13.18
ANISOU   62    O    PHE    8      1392     1295     2322     -256   -400  3  6  4
ATOM     63    N    SER    9     23.478   29.096   50.394  1.000 13.03
ANISOU   63    N    SER    9      1722     1636     1593     -565   -601  4  9  0
ATOM     64    CA   SER    9     22.861   30.224   49.718  1.000 12.55
ANISOU   64    CA   SER    9      1591     1468     1708     -392   -438  3  1  5
ATOM     65    CB   SER    9     23.743   31.472   49.761  1.000 15.41
ANISOU   65    CB   SER    9      2385     1833     1637     -915   -1057  7  8  3
ATOM     66    OG   SER    9     23.138   32.539   49.007  1.000 17.99
ANISOU   66    OG   SER    9      2504     1721     2611     -718   -999  9  2  4
ATOM     67    C    SER    9     22.520   29.868   48.276  1.000 12.72
ANISOU   67    C    SER    9      2040     1187     1606     -411   -576  4  7  6
ATOM     68    O    SER    9     23.397   29.495   47.478  1.000 16.18
ANISOU   68    O    SER    9      2265     2053     1830     -465   -381  7  3
ATOM     69    N    LEU   10     21.229   29.982   47.968  1.000 14.19
ANISOU   69    N    LEU   10      2154     1488     1750     -301   -699  1  7  4
ATOM     70    CA   LEU   10     20.798   29.714   46.596  1.000 14.62
ANISOU   70    CA   LEU   10      2243     1579     1734     -184   -784  2  2  4
ATOM     71    CB   LEU   10     19.291   29.883   46.436  1.000 14.72
ANISOU   71    CB   LEU   10      2222     1714     1657     -142   -657  -1  6  8
ATOM     72    CG   LEU   10     18.693   29.633   45.050  1.000 14.10
ANISOU   72    CG   LEU   10      2087     1557     1713     -702   -695  1  4  5
ATOM     73    CD1  LEU   10     18.986   28.214   44.582  1.000 16.23
ANISOU   73    CD1  LEU   10      2994     1578     1595     -554   -1132  8  7
ATOM     74    CD2  LEU   10     17.198   29.913   44.997  1.000 21.82
ANISOU   74    CD2  LEU   10      2180     2904     3206     -421   -1151  -5  1  8
ATOM     75    C    LEU   10     21.531   30.639   45.626  1.000 15.87
ANISOU   75    C    LEU   10      2449     1785     1796     -491   -844  3  1  4
ATOM     76    O    LEU   10     21.962   30.199   44.553  1.000 16.33
ANISOU   76    O    LEU   10      2607     1816     1780     -601   -829  2  7  6
ATOM     77    N    ALA   11     21.669   31.917   45.986  1.000 17.17
ANISOU   77    N    ALA   11      2521     1889     2115     -607   -548  1  3  9
ATOM     78    CA   ALA   11     22.335   32.912   45.129  1.000 16.56
ANISOU   78    CA   ALA   11      2377     1884     2029     -732   -1033  3  0  2
ATOM     79    CB   ALA   11     22.199   34.259   45.805  1.000 20.05
ANISOU   79    CB   ALA   11      3210     1877     2529     -670   -674  2  5  9
ATOM     80    C    ALA   11     23.786   32.535   44.831  1.000 16.33
ANISOU   80    C    ALA   11      2319     2255     1629     -754   -988  4  3  4
ATOM     81    O    ALA   11     24.260   32.587   43.677  1.000 19.66
ANISOU   81    O    ALA   11      3115     2559     1795     -947   -560  6  1  9
ATOM     82    N    GLU   12     24.558   32.085   45.810  1.000 17.28
ANISOU   82    N    GLU   12      2686     1994     1884     -454   -1087  3  9  0
ATOM     83    CA   GLU   12     25.931   31.654   45.752  1.000 16.34
ANISOU   83    CA   GLU   12      2703     1674     1831     -474   -889  1  0  3  3
ATOM     84    CB   GLU   12     26.527   31.477   47.158  1.000 16.09
ANISOU   84    CB   GLU   12      2440     1867     1808     -770   -820  1  0  5  8
ATOM     85    CG   GLU   12     26.633   32.802   47.915  1.000 18.90
ANISOU   85    CG   GLU   12      2717     2127     2335     -1216  -1090  7  8  8
ATOM     86    CD   GLU   12     27.115   32.657   49.342  1.000 21.17
ANISOU   86    CD   GLU   12      3300     2547     2198     -1182  -1053  7  2  4
ATOM     87    OE1  GLU   12     27.538   31.558   49.756  1.000 22.07
ANISOU   87    OE1  GLU   12      2722     3014     2650     -720   -1365  7  9  7
ATOM     88    OE2  GLU   12     27.068   33.679   50.059  1.000 29.26
ANISOU   88    OE2  GLU   12      5764     2634     2722     -1279  -1848  4  7  6
ATOM     89    C    GLU   12     25.997   30.402   44.882  1.000 17.16
ANISOU   89    C    GLU   12      2044     2319     2158     -624   -715  4  8  1
ATOM     90    O    GLU   12     26.879   30.317   44.032  1.000 18.88
ANISOU   90    O    GLU   12      3200     2388     1583     -1004  -306  8  9  9
ATOM     91    N    LEU   13     25.083   29.441   45.049  1.000 17.32
ANISOU   91    N    LEU   13      2176     2300     2104     -659   -386  9  4
ATOM     92    CA   LEU   13     25.082   28.252   44.189  1.000 14.00
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ANISOU	92	CA	LEU	13	1734	1873	1713	-140	-170	498
ATOM	93	CB	LEU	13	24.003	27.248	44.620	1.000	15.37	
ANISOU	93	CB	LEU	13	2205	1838	1795	-375	-149	465
ATOM	94	CG	LEU	13	24.154	26.554	45.967	1.000	14.52	
ANISOU	94	CG	LEU	13	1913	1803	1799	-280	-204	442
ATOM	95	CD1	LEU	13	22.934	25.680	46.193	1.000	15.15	
ANISOU	95	CD1	LEU	13	2174	1817	1766	-433	185	175
ATOM	96	CD2	LEU	13	25.411	25.690	46.067	1.000	17.54	
ANISOU	96	CD2	LEU	13	2119	2043	2502	-38	-419	270
ATOM	97	C	LEU	13	24.876	28.626	42.725	1.000	16.54	
ANISOU	97	C	LEU	13	2510	2062	1710	-222	-93	565
ATOM	98	O	LEU	13	25.548	28.122	41.821	1.000	18.28	
ANISOU	98	O	LEU	13	2685	2514	1748	-687	75	259
ATOM	99	N	GLN	14	23.945	29.534	42.472	1.000	16.86	
ANISOU	99	N	GLN	14	1970	2337	2100	-557	-683	838
ATOM	100	CA	GLN	14	23.657	30.015	41.132	1.000	18.63	
ANISOU	100	CA	GLN	14	2761	2404	1915	-610	-802	568
ATOM	101	CB	GLN	14	22.421	30.923	41.130	1.000	19.39	
ANISOU	101	CB	GLN	14	3166	2176	2025	-392	-918	977
ATOM	102	CG	GLN	14	21.108	30.250	41.460	1.000	19.00	
ANISOU	102	CG	GLN	14	2879	2383	1957	-209	-725	460
ATOM	103	CD	GLN	14	19.974	31.227	41.766	1.000	18.83	
ANISOU	103	CD	GLN	14	3139	2118	1897	-6	-1229	494
ATOM	104	OE1	GLN	14	20.177	32.317	42.314	1.000	26.10	
ANISOU	104	OE1	GLN	14	3928	2407	3582	-98	-1172	-241
ATOM	105	NE2	GLN	14	18.745	30.823	41.411	1.000	20.94	
ANISOU	105	NE2	GLN	14	2900	2716	2340	-149	-840	454
ATOM	106	C	GLN	14	24.804	30.812	40.525	1.000	20.40	
ANISOU	106	C	GLN	14	3226	2458	2065	-795	-712	937
ATOM	107	O	GLN	14	24.812	30.951	39.311	1.000	30.48	
ANISOU	107	O	GLN	14	5089	4340	2152	-2337	-898	1211
ATOM	108	N	GLN	15	25.734	31.309	41.329	1.000	20.35	
ANISOU	108	N	GLN	15	3252	2452	2030	-1067	-240	497
ATOM	109	CA	GLN	15	26.909	32.041	40.884	1.000	21.88	
ANISOU	109	CA	GLN	15	3184	3230	1901	-1152	-299	788
ATOM	110	CB	GLN	15	27.288	33.100	41.920	1.000	22.20	
ANISOU	110	CB	GLN	15	2720	3162	2551	-1131	-770	691
ATOM	111	CG	GLN	15	26.450	34.358	41.954	1.000	25.73	
ANISOU	111	CG	GLN	15	4496	2735	2545	-821	-233	1269
ATOM	112	CD	GLN	15	26.325	35.021	43.306	1.000	35.76	
ANISOU	112	CD	GLN	15	6010	3945	3631	-643	-229	-135
ATOM	113	OE1	GLN	15	27.145	34.884	44.225	1.000	49.13	
ANISOU	113	OE1	GLN	15	8425	5866	4378	-2857	-2197	-564
ATOM	114	NE2	GLN	15	25.255	35.812	43.489	1.000	51.85	
ANISOU	114	NE2	GLN	15	7190	5567	6945	62	3066	107
ATOM	115	C	GLN	15	28.069	31.079	40.625	1.000	23.93	
ANISOU	115	C	GLN	15	3451	3513	2127	-990	145	884
ATOM	116	O	GLN	15	29.177	31.448	40.213	1.000	28.95	
ANISOU	116	O	GLN	15	3535	4619	2845	-899	510	1225
ATOM	117	N	GLY	16	27.828	29.794	40.891	1.000	25.86	
ANISOU	117	N	GLY	16	4089	3282	2457	-889	-36	469
ATOM	118	CA	GLY	16	28.812	28.763	40.649	1.000	29.00	
ANISOU	118	CA	GLY	16	4785	3562	2671	-677	765	255
ATOM	119	C	GLY	16	29.741	28.546	41.814	1.000	25.45	
ANISOU	119	C	GLY	16	3427	3490	2754	-264	1422	673
ATOM	120	O	GLY	16	30.805	27.955	41.625	1.000	29.63	
ANISOU	120	O	GLY	16	3925	3267	4068	-66	1997	523
ATOM	121	N	LEU	17	29.387	28.979	43.015	1.000	22.50	
ANISOU	121	N	LEU	17	3266	2713	2569	-39	923	733
ATOM	122	CA	LEU	17	30.234	28.727	44.172	1.000	21.73	
ANISOU	122	CA	LEU	17	2299	2931	3025	-282	867	748

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ATOM    123  CB  LEU  17   30.124  29.921  45.132 1.000 21.23
ANISOU  123  CB  LEU  17    2137    2858    3071   -620  669  711
ATOM    124  CG  LEU  17   30.354  31.274  44.431 1.000 26.12
ANISOU  124  CG  LEU  17    2708    2965    4253   -889 1342  931
ATOM    125  CD1 LEU  17   29.962  32.444  45.305 1.000 29.81
ANISOU  125  CD1 LEU  17    2515    2924    5885   -396  464  303
ATOM    126  CD2 LEU  17   31.808  31.350  43.974 1.000 32.84
ANISOU  126  CD2 LEU  17    2845    3703    5930   -281 1871 2114
ATOM    127  C   LEU  17   29.886  27.456  44.936 1.000 19.36
ANISOU  127  C   LEU  17    2081    2819    2455   -239  545  580
ATOM    128  O   LEU  17   28.773  26.920  44.848 1.000 21.11
ANISOU  128  O   LEU  17    2284    3004    2734   -444  107 1055
ATOM    129  N   HIS  18   30.838  26.952  45.706 1.000 21.02
ANISOU  129  N   HIS  18    2124    2752    3109   -314  193  491
ATOM    130  CA  HIS  18   30.678  25.814  46.615 1.000 18.11
ANISOU  130  CA  HIS  18    1569    2996    2315   -460  -28  361
ATOM    131  CB  HIS  18   29.655  26.149  47.702 1.000 21.25
ANISOU  131  CB  HIS  18    1731    3332    3010    -45  282  354
ATOM    132  CG  HIS  18   29.796  27.515  48.283 1.000 23.28
ANISOU  132  CG  HIS  18    2234    3612    2999    211   -46  -20
ATOM    133  CD2 HIS  18   28.898  28.535  48.344 1.000 24.53
ANISOU  133  CD2 HIS  18    3112    3479    2728    532   414  400
ATOM    134  ND1 HIS  18   30.940  27.977  48.895 1.000 26.72
ANISOU  134  ND1 HIS  18    2938    4039    3173   -151  -569  38
ATOM    135  CE1 HIS  18   30.756  29.218  49.307 1.000 29.80
ANISOU  135  CE1 HIS  18    4476    3775    3071   -542  -562  237
ATOM    136  NE2 HIS  18   29.524  29.581  48.985 1.000 30.03
ANISOU  136  NE2 HIS  18    4752    3282    3377    216  -148  338
ATOM    137  C   HIS  18   30.266  24.528  45.917 1.000 18.57
ANISOU  137  C   HIS  18    1943    3084    2028   -951   30  590
ATOM    138  O   HIS  18   29.594  23.682  46.532 1.000 19.92
ANISOU  138  O   HIS  18    1949    3125    2493   -777  -87  995
ATOM    139  N   GLN  19   30.647  24.340  44.658 1.000 19.24
ANISOU  139  N   GLN  19    2329    2700    2282   -256  298  494
ATOM    140  CA  GLN  19   30.119  23.206  43.908 1.000 21.51
ANISOU  140  CA  GLN  19    3249    2431    2492   -228  597  318
ATOM    141  CB  GLN  19   30.446  23.307  42.406 1.000 22.89
ANISOU  141  CB  GLN  19    3231    3058    2408   -148  463  244
ATOM    142  CG  GLN  19   29.738  24.453  41.698 1.000 25.83
ANISOU  142  CG  GLN  19    3445    3712    2658   -384  -407  568
ATOM    143  CD  GLN  19   28.223  24.470  41.747 1.000 31.56
ANISOU  143  CD  GLN  19    3439    4722    3832   -252  -988  357
ATOM    144  OE1 GLN  19   27.521  23.640  41.153 1.000 38.51
ANISOU  144  OE1 GLN  19    3869    3649    7115    377 -3045  686
ATOM    145  NE2 GLN  19   27.621  25.433  42.475 1.000 33.32
ANISOU  145  NE2 GLN  19    3303    5695    3663    647 -1109  449
ATOM    146  C   GLN  19   30.578  21.873  44.485 1.000 20.32
ANISOU  146  C   GLN  19    2224    2710    2785    -60  514  394
ATOM    147  O   GLN  19   29.806  20.900  44.473 1.000 19.08
ANISOU  147  O   GLN  19    1888    2451    2910    221  257  743
ATOM    148  N   ASP  20   31.800  21.761  44.999 1.000 24.09
ANISOU  148  N   ASP  20    3001    3507    2645   -773 -507  415
ATOM    149  CA  ASP  20   32.268  20.498  45.553 1.000 21.82
ANISOU  149  CA  ASP  20    1707    3811    2774   -327  -58  357
ATOM    150  CB  ASP  20   33.780  20.527  45.779 1.000 26.34
ANISOU  150  CB  ASP  20    1594    4552    3863   -962  236  490
ATOM    151  CG  ASP  20   34.596  20.517  44.503 1.000 34.45
ANISOU  151  CG  ASP  20    2531    5859    4701  -1208 1213 -280
ATOM    152  OD1 ASP  20   34.177  19.982  43.457 1.000 33.11
ANISOU  152  OD1 ASP  20    3768    4173    4640   -311 1233 -375
ATOM    153  OD2 ASP  20   35.725  21.056  44.532 1.000 49.71
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ANISOU	153	OD2	ASP	20	3445	9922	5519	-3116	1710	5 3
ATOM	154	C	ASP	20	31.538	20.179	46.862	1.000	21.03	
ANISOU	154	C	ASP	20	1876	2702	3412	-231	616	3 8 8
ATOM	155	O	ASP	20	31.118	19.038	47.075	1.000	20.80	
ANISOU	155	O	ASP	20	1162	2583	4157	-72	-139	5 5 0
ATOM	156	N	GLU	21	31.359	21.177	47.729	1.000	17.88	
ANISOU	156	N	GLU	21	1218	2751	2824	-263	-148	5 1 1
ATOM	157	CA	GLU	21	30.599	20.999	48.965	1.000	16.80	
ANISOU	157	CA	GLU	21	1128	2173	3083	-96	46	3 9 4
ATOM	158	CB	GLU	21	30.654	22.304	49.781	1.000	20.23	
ANISOU	158	CB	GLU	21	1366	2620	3701	5	-262	-210
ATOM	159	CG	GLU	21	32.040	22.669	50.307	1.000	24.60	
ANISOU	159	CG	GLU	21	1660	3325	4359	-221	-654	-301
ATOM	160	CD	GLU	21	32.860	23.565	49.402	1.000	28.46	
ANISOU	160	CD	GLU	21	1191	4348	5275	-498	-1597	1125
ATOM	161	OE1	GLU	21	33.751	24.294	49.919	1.000	31.17	
ANISOU	161	OE1	GLU	21	2360	4428	5057	-1039	-1094	3 4 9
ATOM	162	OE2	GLU	21	32.664	23.590	48.171	1.000	31.16	
ANISOU	162	OE2	GLU	21	2734	3901	5203	-1519	-1565	1123
ATOM	163	C	GLU	21	29.159	20.594	48.689	1.000	16.44	
ANISOU	163	C	GLU	21	1271	2295	2679	-165	-53	4 3 0
ATOM	164	O	GLU	21	28.599	19.700	49.329	1.000	14.30	
ANISOU	164	O	GLU	21	1271	2257	1907	-417	-301	3 6
ATOM	165	N	PHE	22	28.548	21.257	47.708	1.000	16.14	
ANISOU	165	N	PHE	22	1440	2441	2253	-316	-28	3 2 8
ATOM	166	CA	PHE	22	27.155	20.947	47.327	1.000	15.36	
ANISOU	166	CA	PHE	22	1530	2012	2294	-262	-173	2 8 1
ATOM	167	CB	PHE	22	26.612	21.967	46.343	1.000	15.43	
ANISOU	167	CB	PHE	22	1863	2056	1944	-316	-247	1 8 4
ATOM	168	CG	PHE	22	25.119	21.932	46.077	1.000	15.59	
ANISOU	168	CG	PHE	22	1822	2141	1962	-299	-170	5 6 1
ATOM	169	CD1	PHE	22	24.218	21.987	47.129	1.000	17.03	
ANISOU	169	CD1	PHE	22	1923	2605	1943	-410	-162	-40
ATOM	170	CD2	PHE	22	24.606	21.856	44.797	1.000	14.84	
ANISOU	170	CD2	PHE	22	1541	2083	2013	51	-94	-155
ATOM	171	CE1	PHE	22	22.861	21.938	46.906	1.000	15.96	
ANISOU	171	CE1	PHE	22	1844	1805	2414	-159	-64	1 7 6
ATOM	172	CE2	PHE	22	23.243	21.797	44.551	1.000	15.81	
ANISOU	172	CE2	PHE	22	1600	1993	2416	-261	-190	-176
ATOM	173	CZ	PHE	22	22.360	21.853	45.612	1.000	14.18	
ANISOU	173	CZ	PHE	22	1427	1430	2531	-105	-164	3 2 5
ATOM	174	C	PHE	22	27.049	19.515	46.792	1.000	16.23	
ANISOU	174	C	PHE	22	1325	2042	2797	-110	164	1 0 2
ATOM	175	O	PHE	22	26.183	18.751	47.229	1.000	13.24	
ANISOU	175	O	PHE	22	1411	1743	1876	105	-194	3 9 1
ATOM	176	N	ARG	23	27.888	19.097	45.853	1.000	15.45	
ANISOU	176	N	ARG	23	1585	2313	1971	-167	-80	2 8 9
ATOM	177	CA	ARG	23	27.865	17.746	45.325	1.000	15.49	
ANISOU	177	CA	ARG	23	809	2443	2634	50	-41	-22
ATOM	178	CB	ARG	23	28.928	17.539	44.248	1.000	17.81	
ANISOU	178	CB	ARG	23	966	3142	2658	-128	43	-167
ATOM	179	CG	ARG	23	28.470	17.928	42.860	1.000	25.86	
ANISOU	179	CG	ARG	23	2719	4636	2470	-758	-176	-49
ATOM	180	CD	ARG	23	29.485	17.370	41.867	1.000	34.68	
ANISOU	180	CD	ARG	23	5148	4847	3183	-1532	1634	-548
ATOM	181	NE	ARG	23	30.660	18.253	41.877	1.000	31.13	
ANISOU	181	NE	ARG	23	2799	4194	4836	305	747	6 6
ATOM	182	CZ	ARG	23	30.703	19.424	41.244	1.000	34.24	
ANISOU	182	CZ	ARG	23	2749	4844	5418	-757	239	7 6 4
ATOM	183	NH1	ARG	23	29.647	19.856	40.551	1.000	28.06	
ANISOU	183	NH1	ARG	23	2714	3685	4263	-721	555	1 8 1

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ATOM    184  NH2 ARG  23   31.830  20.114  41.340  1.000 36.08
ANISOU  184  NH2 ARG  23    2261    5328    6121    -562   776   -86
ATOM    185  C   ARG  23   28.045  16.713  46.420  1.000 15.06
ANISOU  185  C   ARG  23    1071    2061    2589     167   -32   -234
ATOM    186  O   ARG  23   27.335  15.687  46.410  1.000 16.28
ANISOU  186  O   ARG  23    1443    2244    2497    -118   -71   -277
ATOM    187  N   ARG  24   28.952  16.988  47.353  1.000 15.27
ANISOU  187  N   ARG  24    1024    2156    2623     -52   -21     29
ATOM    188  CA  ARG  24   29.193  16.003  48.430  1.000 17.70
ANISOU  188  CA  ARG  24    1443    2589    2693     275    -22    215
ATOM    189  CB  ARG  24   30.466  16.422  49.148  1.000 21.11
ANISOU  189  CB  ARG  24    1244    3486    3289     484   -257   384
ATOM    190  CG  ARG  24   31.787  16.217  48.429  1.000 30.46
ANISOU  190  CG  ARG  24    1438    5078    5057     426    441   308
ATOM    191  CD  ARG  24   32.979  16.537  49.330  1.000 33.50
ANISOU  191  CD  ARG  24    1163    5831    5736     208    370   458
ATOM    192  NE  ARG  24   33.636  17.804  49.071  1.000 51.46
ANISOU  192  NE  ARG  24    5800    7316    6437   -2596  -1688  1165
ATOM    193  CZ  ARG  24   33.973  18.776  49.903  1.000 46.72
ANISOU  193  CZ  ARG  24    4738    6888    6124   -1719  -1822  1316
ATOM    194  NH1 ARG  24   33.731  18.728  51.213  1.000 44.24
ANISOU  194  NH1 ARG  24    2650    6998    7160    -392   1001   84
ATOM    195  NH2 ARG  24   34.579  19.871  49.448  1.000 42.82
ANISOU  195  NH2 ARG  24    5339    4428    6503     513   -991  1216
ATOM    196  C   ARG  24   27.972  15.887  49.334  1.000 17.16
ANISOU  196  C   ARG  24    1549    2071    2900     129    140   295
ATOM    197  O   ARG  24   27.536  14.779  49.713  1.000 15.38
ANISOU  197  O   ARG  24    1706    1890    2247      72  -388   104
ATOM    198  N   CYS  25   27.355  17.011  49.696  1.000 12.91
ANISOU  198  N   CYS  25     907   1824    2176    -254   -386   151
ATOM    199  CA  CYS  25   26.105  17.040  50.454  1.000 12.45
ANISOU  199  CA  CYS  25     942   1838    1949    -178   -480     81
ATOM    200  CB  CYS  25   25.660  18.491  50.697  1.000 11.67
ANISOU  200  CB  CYS  25    1150    1759    1527    -136   -604  184
ATOM    201  SG  CYS  25   23.973  18.580  51.425  1.000 14.90
ANISOU  201  SG  CYS  25    1465    1593    2602    -164   -26   -18
ATOM    202  C   CYS  25   25.001  16.225  49.769  1.000 11.67
ANISOU  202  C   CYS  25     893   1897    1645    -283   -64   -86
ATOM    203  O   CYS  25   24.360  15.377  50.390  1.000 12.73
ANISOU  203  O   CYS  25    1347    1426    2064    -233  -196  123
ATOM    204  N   LEU  26   24.798  16.461  48.470  1.000 11.70
ANISOU  204  N   LEU  26    1102    1530    1814    -128   -390   1
ATOM    205  CA  LEU  26   23.766  15.716  47.735  1.000 11.11
ANISOU  205  CA  LEU  26    1190    1476    1556    -238   -79   -194
ATOM    206  CB  LEU  26   23.674  16.198  46.285  1.000 11.54
ANISOU  206  CB  LEU  26    1345    1522    1518    -75   -84   -202
ATOM    207  CG  LEU  26   23.242  17.638  46.019  1.000 12.42
ANISOU  207  CG  LEU  26    1199    1542    1978    -153   -167   -40
ATOM    208  CD1 LEU  26   23.414  17.993  44.539  1.000 14.77
ANISOU  208  CD1 LEU  26    1428    1916    2270     43   131   401
ATOM    209  CD2 LEU  26   21.814  17.885  46.466  1.000 14.45
ANISOU  209  CD2 LEU  26    1384    2061    2047     264    -32   321
ATOM    210  C   LEU  26   23.979  14.209  47.780  1.000 12.93
ANISOU  210  C   LEU  26    1360    1542    2011    -121   -486  -107
ATOM    211  O   LEU  26   23.011  13.461  48.008  1.000 13.78
ANISOU  211  O   LEU  26    1660    1450    2125    -305   -426   -51
ATOM    212  N   ARG  27   25.196  13.721  47.576  1.000 14.09
ANISOU  212  N   ARG  27    1518    1729    2108     151   -530  -105
ATOM    213  CA  ARG  27   25.491  12.283  47.574  1.000 15.39
ANISOU  213  CA  ARG  27    2260    1690    1897     186    141   -354
ATOM    214  CB  ARG  27   26.846  12.122  46.900  1.000 17.04
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ANISOU	214	CB	ARG	27	2259	2356	1861	517	49	-248	
ATOM	215	CG	ARG	27	27.502	10.780	46.801	1.000	25.08		
ANISOU	215	CG	ARG	27	3110	2837	3583	1105	606	-399	
ATOM	216	CD	ARG	27	28.995	10.992	46.457	1.000	30.32		
ANISOU	216	CD	ARG	27	2976	3836	4710	1190	720	-1381	
ATOM	217	NE	ARG	27	29.818	11.407	47.581	1.000	36.51		
ANISOU	217	NE	ARG	27	3633	4937	5301	121	391	-1429	
ATOM	218	CZ	ARG	27	30.988	12.019	47.560	1.000	38.07		
ANISOU	218	CZ	ARG	27	3334	5192	5941	364	661	-1776	
ATOM	219	NH1	ARG	27	31.565	12.340	46.401	1.000	48.56		
ANISOU	219	NH1	ARG	27	4482	7688	6280	-1305	736	-1326	
ATOM	220	NH2	ARG	27	31.606	12.328	48.701	1.000	40.23		
ANISOU	220	NH2	ARG	27	2891	6127	6266	457	717	-2463	
ATOM	221	C	ARG	27	25.479	11.630	48.949	1.000	14.66		
ANISOU	221	C	ARG	27	1720	1617	2233	135	-33	-42	
ATOM	222	O	ARG	27	24.968	10.499	49.072	1.000	17.44		
ANISOU	222	O	ARG	27	1981	1533	3114	98	-394	155	
ATOM	223	N	ASP	28	26.031	12.308	49.973	1.000	13.72		
ANISOU	223	N	ASP	28	1703	1366	2146	317	-327	319	
ATOM	224	CA	ASP	28	26.227	11.701	51.277	1.000	15.33		
ANISOU	224	CA	ASP	28	1886	1704	2234	538	-247	391	
ATOM	225	CB	ASP	28	27.541	12.280	51.842	1.000	18.31		
ANISOU	225	CB	ASP	28	2092	2709	2155	186	-465	544	
ATOM	226	CG	ASP	28	28.785	11.875	51.083	1.000	23.06		
ANISOU	226	CG	ASP	28	2002	3583	3176	-96	-50	478	
ATOM	227	OD1	ASP	28	28.741	10.904	50.290	1.000	25.09		
ANISOU	227	OD1	ASP	28	2515	2855	4163	830	406	440	
ATOM	228	OD2	ASP	28	29.831	12.528	51.283	1.000	30.05		
ANISOU	228	OD2	ASP	28	1919	4262	5236	-216	-695	1058	
ATOM	229	C	ASP	28	25.092	11.910	52.267	1.000	14.90		
ANISOU	229	C	ASP	28	2071	1435	2154	411	-203	217	
ATOM	230	O	ASP	28	24.967	11.093	53.200	1.000	14.50		
ANISOU	230	O	ASP	28	1878	1501	2132	444	-265	179	
ATOM	231	N	LYS	29	24.317	12.975	52.096	1.000	12.90		
ANISOU	231	N	LYS	29	1487	1290	2126	77	-276	136	
ATOM	232	CA	LYS	29	23.265	13.368	53.029	1.000	12.95		
ANISOU	232	CA	LYS	29	1369	1649	1904	8	-390	14	
ATOM	233	CB	LYS	29	23.699	14.653	53.763	1.000	12.71		
ANISOU	233	CB	LYS	29	1105	1581	2145	209	-359	-30	
ATOM	234	CG	LYS	29	25.016	14.504	54.518	1.000	16.11		
ANISOU	234	CG	LYS	29	1413	1998	2711	21	-818	-161	
ATOM	235	CD	LYS	29	25.449	15.727	55.309	1.000	18.24		
ANISOU	235	CD	LYS	29	2500	1989	2442	-47	-1140	-14	
ATOM	236	CE	LYS	29	26.789	15.445	56.002	1.000	19.36		
ANISOU	236	CE	LYS	29	2038	3171	2148	-90	-822	-725	
ATOM	237	NZ	LYS	29	27.515	16.696	56.351	1.000	26.61		
ANISOU	237	NZ	LYS	29	2592	3146	4373	-309	-1571	-353	
ATOM	238	C	LYS	29	21.888	13.550	52.386	1.000	11.62		
ANISOU	238	C	LYS	29	1432	1153	1831	52	-290	24	
ATOM	239	O	LYS	29	20.877	13.028	52.880	1.000	12.57		
ANISOU	239	O	LYS	29	1426	1556	1792	-97	-282	100	
ATOM	240	N	GLY	30	21.779	14.280	51.284	1.000	11.98		
ANISOU	240	N	GLY	30	1359	1454	1741	-5	-310	78	
ATOM	241	CA	GLY	30	20.510	14.478	50.562	1.000	10.93		
ANISOU	241	CA	GLY	30	1192	1497	1465	-158	-116	-18	
ATOM	242	C	GLY	30	19.544	15.433	51.242	1.000	11.15		
ANISOU	242	C	GLY	30	1137	1143	1955	-260	-154	-131	
ATOM	243	O	GLY	30	18.337	15.374	50.963	1.000	11.26		
ANISOU	243	O	GLY	30	1247	1082	1949	-56	-419	104	
ATOM	244	N	LEU	31	20.064	16.278	52.129	1.000	10.54		
ANISOU	244	N	LEU	31	1292	894	1821	-98	-367	89	

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ATOM    245  CA  LEU  31   19.272  17.324  52.803  1.000 11.07
ANISOU  245  CA  LEU  31   1345    1111    1752     46  -520   -33
ATOM    246  CB  LEU  31   18.465  16.777  53.975  1.000 14.44
ANISOU  246  CB  LEU  31   1753    1671    2062    -284   -80  -178
ATOM    247  CG  LEU  31   19.113  16.629  55.333  1.000 17.74
ANISOU  247  CG  LEU  31   2456    2220    2064    -172  -115 499
ATOM    248  CD1 LEU  31   18.220  15.978  56.371  1.000 26.19
ANISOU  248  CD1 LEU  31   2716    4691    2543   -1224  -213 1016
ATOM    249  CD2 LEU  31   20.388  15.821  55.182  1.000 22.77
ANISOU  249  CD2 LEU  31   3121    2633    2899     650   -18  1487
ATOM    250  C   LEU  31   20.176  18.498  53.195  1.000 10.95
ANISOU  250  C   LEU  31   1041    1129    1989     180   -318  -223
ATOM    251  O   LEU  31   21.376  18.314  53.424  1.000 10.89
ANISOU  251  O   LEU  31   1015    1171    1952     69  -160   204
ATOM    252  N   PHE  32   19.570  19.688  53.219  1.000 11.42
ANISOU  252  N   PHE  32   1134    995  2211     75  -273   65
ATOM    253  CA  PHE  32   20.280  20.916  53.545  1.000 10.33
ANISOU  253  CA  PHE  32   1071    1152    1703     -57   -288  -33
ATOM    254  CB  PHE  32   21.244  21.307  52.422  1.000 12.25
ANISOU  254  CB  PHE  32   1054    1729    1872    -113   -173   -5
ATOM    255  CG  PHE  32   20.624  21.346  51.041  1.000 11.94
ANISOU  255  CG  PHE  32   1158    1572    1809    -281   -148  122
ATOM    256  CD1 PHE  32   20.522  20.188  50.270  1.000 11.12
ANISOU  256  CD1 PHE  32   1070    1308    1846    -182   -458  318
ATOM    257  CD2 PHE  32   20.145  22.528  50.513  1.000 12.14
ANISOU  257  CD2 PHE  32   1618    1353    1639    -300   -185   -47
ATOM    258  CE1 PHE  32   19.943  20.212  49.015  1.000 12.00
ANISOU  258  CE1 PHE  32   1342    1377    1840    -301   -468  332
ATOM    259  CE2 PHE  32   19.553  22.534  49.266  1.000 12.79
ANISOU  259  CE2 PHE  32   1858    1543    1457     -86    -34   28
ATOM    260  CZ  PHE  32   19.416  21.376  48.503  1.000 11.50
ANISOU  260  CZ  PHE  32   1623    1414    1331     -76   -272  217
ATOM    261  C   PHE  32   19.310  22.071  53.762  1.000 9.82
ANISOU  261  C   PHE  32   1015    1042    1674     -120   -367   -77
ATOM    262  O   PHE  32   18.165  21.990  53.285  1.000 11.29
ANISOU  262  O   PHE  32   1097    1286    1906     -95   -495   -77
ATOM    263  N   TYR  33   19.736  23.099  54.493  1.000 12.68
ANISOU  263  N   TYR  33   1606    1053    2158     -57   -766  -159
ATOM    264  CA  TYR  33   18.945  24.335  54.607  1.000 10.64
ANISOU  264  CA  TYR  33   1491    1173    1380     -77    -97  -132
ATOM    265  CB  TYR  33   19.141  25.022  55.955  1.000 10.85
ANISOU  265  CB  TYR  33   1019    1725    1379     -260   -224  -164
ATOM    266  CG  TYR  33   18.545  24.331  57.156  1.000 10.71
ANISOU  266  CG  TYR  33   1173    1552    1342     -45   -230  -117
ATOM    267  CD1 TYR  33   17.266  24.643  57.619  1.000 11.64
ANISOU  267  CD1 TYR  33   1385    1441    1596     -68    83   -94
ATOM    268  CE1 TYR  33   16.694  24.023  58.719  1.000 13.60
ANISOU  268  CE1 TYR  33   1879    1483    1804     -147   339   -26
ATOM    269  CD2 TYR  33   19.273  23.364  57.853  1.000 14.04
ANISOU  269  CD2 TYR  33   1604    2040    1689     132   -509  127
ATOM    270  CE2 TYR  33   18.711  22.752  58.964  1.000 15.75
ANISOU  270  CE2 TYR  33   1872    2227    1886     -187   -701  433
ATOM    271  CZ  TYR  33   17.438  23.078  59.387  1.000 16.02
ANISOU  271  CZ  TYR  33   2205    1939    1942     -332   -154  300
ATOM    272  OH  TYR  33   16.919  22.454  60.504  1.000 19.95
ANISOU  272  OH  TYR  33   3412    2154    2015     -60    278   400
ATOM    273  C   TYR  33   19.357  25.253  53.452  1.000 10.92
ANISOU  273  C   TYR  33   1249    1448    1453     -125   -271  149
ATOM    274  O   TYR  33   20.514  25.192  53.006  1.000 11.50
ANISOU  274  O   TYR  33   1204    1375    1791     -98   -270  281
ATOM    275  N   LEU  34   18.399  26.049  53.000  1.000 11.28
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ANISOU	275	N	LEU	34	1159	1265	1862	-210	-149	1	2	1
ATOM	276	CA	LEU	34	18.577	26.942	51.864	1.000	12.99			
ANISOU	276	CA	LEU	34	1565	1444	1926	81	-478	2	7	4
ATOM	277	CB	LEU	34	17.757	26.420	50.682	1.000	13.96			
ANISOU	277	CB	LEU	34	2007	1301	1995	-430	-459	3	2	1
ATOM	278	CG	LEU	34	17.990	27.112	49.334	1.000	13.81			
ANISOU	278	CG	LEU	34	2085	1322	1839	-331	-365	1	9	8
ATOM	279	CD1	LEU	34	19.308	26.691	48.704	1.000	15.94			
ANISOU	279	CD1	LEU	34	2123	1793	2140	-10	-313	6	0	7
ATOM	280	CD2	LEU	34	16.818	26.799	48.411	1.000	16.36			
ANISOU	280	CD2	LEU	34	2186	1837	2193	122	-721	1	3	4
ATOM	281	C	LEU	34	18.195	28.361	52.241	1.000	13.03			
ANISOU	281	C	LEU	34	1676	1418	1857	31	-643	2	1	8
ATOM	282	O	LEU	34	17.055	28.647	52.595	1.000	13.99			
ANISOU	282	O	LEU	34	1690	1281	2344	140	-714	8	5	
ATOM	283	N	THR	35	19.148	29.283	52.175	1.000	15.03			
ANISOU	283	N	THR	35	1837	1584	2288	-118	-625	-	3	
ATOM	284	CA	THR	35	18.918	30.704	52.369	1.000	14.80			
ANISOU	284	CA	THR	35	1866	1560	2196	-169	-175	-	1	4	4
ATOM	285	CB	THR	35	20.013	31.366	53.232	1.000	15.65			
ANISOU	285	CB	THR	35	2025	1719	2202	-149	-204	-	2	8	1
ATOM	286	OG1	THR	35	21.276	31.115	52.601	1.000	18.81			
ANISOU	286	OG1	THR	35	1885	2679	2583	-279	-229	-	7	2	8
ATOM	287	CG2	THR	35	20.138	30.811	54.622	1.000	18.84			
ANISOU	287	CG2	THR	35	2523	2207	2427	-850	-510	1	5	5
ATOM	288	C	THR	35	18.915	31.456	51.043	1.000	15.07			
ANISOU	288	C	THR	35	1904	1473	2348	-57	-283	-	7	0
ATOM	289	O	THR	35	19.209	30.909	49.973	1.000	15.00			
ANISOU	289	O	THR	35	2034	1520	2145	-215	-372	8	9	
ATOM	290	N	ASP	36	18.564	32.739	51.086	1.000	17.46			
ANISOU	290	N	ASP	36	2302	1366	2968	-209	-766	-	1	2	0
ATOM	291	CA	ASP	36	18.618	33.606	49.924	1.000	17.91			
ANISOU	291	CA	ASP	36	2150	1592	3063	112	-660	8	6	
ATOM	292	CB	ASP	36	20.063	33.845	49.471	1.000	17.91			
ANISOU	292	CB	ASP	36	2153	1584	3067	84	-587	-	4	2
ATOM	293	CG	ASP	36	20.948	34.545	50.469	1.000	19.23			
ANISOU	293	CG	ASP	36	2575	2160	2571	-642	-324	1	8	1
ATOM	294	OD1	ASP	36	20.426	35.304	51.325	1.000	24.17			
ANISOU	294	OD1	ASP	36	2843	3055	3284	152	-1013	-	6	5	2
ATOM	295	OD2	ASP	36	22.199	34.355	50.412	1.000	21.00			
ANISOU	295	OD2	ASP	36	2637	2571	2772	-382	-834	-	3	9	3
ATOM	296	C	ASP	36	17.783	33.038	48.784	1.000	18.20			
ANISOU	296	C	ASP	36	2402	1736	2779	-446	-390	1	9	1
ATOM	297	O	ASP	36	18.222	33.063	47.629	1.000	18.98			
ANISOU	297	O	ASP	36	2127	2022	3062	-464	-60	-	2	5	2
ATOM	298	N	CYS	37	16.593	32.547	49.077	1.000	17.22			
ANISOU	298	N	CYS	37	1873	2190	2479	63	-350	-	1	
ATOM	299	CA	CYS	37	15.730	31.945	48.043	1.000	15.98			
ANISOU	299	CA	CYS	37	1997	1590	2485	-81	-65	-	1	8	4
ATOM	300	CB	CYS	37	15.621	30.423	48.252	1.000	18.87			
ANISOU	300	CB	CYS	37	2112	1790	3268	-114	-405	5	7	0
ATOM	301	SG	CYS	37	14.753	29.917	49.759	1.000	19.42			
ANISOU	301	SG	CYS	37	2532	1683	3164	-74	-230	3	2	2
ATOM	302	C	CYS	37	14.349	32.580	47.958	1.000	16.12			
ANISOU	302	C	CYS	37	1992	1669	2465	-175	-504	1	6	
ATOM	303	O	CYS	37	13.483	32.032	47.253	1.000	20.60			
ANISOU	303	O	CYS	37	2761	1769	3296	-241	-1333	5	1	
ATOM	304	N	GLY	38	14.125	33.714	48.617	1.000	17.89			
ANISOU	304	N	GLY	38	1847	1572	3381	209	-898	-	1	1	1
ATOM	305	CA	GLY	38	12.850	34.404	48.587	1.000	18.16			
ANISOU	305	CA	GLY	38	1608	2126	3164	141	-999	-	6		

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ATOM    306  C   GLY  38   11.843  33.864  49.589  1.000 21.98
ANISOU  306  C   GLY  38    2598    2574    3180     262    -97   -455
ATOM    307  O   GLY  38   10.677  34.273  49.499  1.000 22.75
ANISOU  307  O   GLY  38    2542    3027    3073     241     79    -97
ATOM    308  N   LEU  39   12.241  32.982  50.501  1.000 21.93
ANISOU  308  N   LEU  39    2112    3318    2903     -65   -102   -154
ATOM    309  CA  LEU  39   11.443  32.357  51.545  1.000 26.16
ANISOU  309  CA  LEU  39    3141    3610    3188   -107    162    -400
ATOM    310  CB  LEU  39   11.220  30.868  51.277  1.000 28.13
ANISOU  310  CB  LEU  39    2980    3192    4516    -352   -848    258
ATOM    311  CG  LEU  39   10.296  30.434  50.157  1.000 27.39
ANISOU  311  CG  LEU  39    3352    2591    4463     541   -637   -1052
ATOM    312  CD1 LEU  39   10.472  28.940  49.910  1.000 28.66
ANISOU  312  CD1 LEU  39    3375    2293    5221     581   -150   -190
ATOM    313  CD2 LEU  39    8.838  30.768  50.478  1.000 30.62
ANISOU  313  CD2 LEU  39    3155    2985    5496    1275  -1485   -208
ATOM    314  C   LEU  39   12.060  32.430  52.949  1.000 26.26
ANISOU  314  C   LEU  39    2868    3969    3143    -796    170    335
ATOM    315  O   LEU  39   13.105  31.861  53.266  1.000 35.57
ANISOU  315  O   LEU  39    4990    4057    4470     804   -630    320
ATOM    316  N   THR  40   11.388  33.136  53.827  1.000 26.61
ANISOU  316  N   THR  40    3425    3883    2803    -703   -191    102
ATOM    317  CA  THR  40   11.676  33.329  55.228  1.000 22.95
ANISOU  317  CA  THR  40    1972    3864    2886       4   -608    518
ATOM    318  C   THR  40   10.380  33.424  56.031  1.000 27.03
ANISOU  318  C   THR  40    2331    4900    3040    -690   -220     -3
ATOM    319  O   THR  40    9.254  33.316  55.537  1.000 25.98
ANISOU  319  O   THR  40    2148    4860    2864    -546     36   -720
ATOM    320  CB  THR  40   12.476  34.624  55.456  1.000 27.16
ANISOU  320  CB  THR  40    2646    4799    2874    -932   -391    148
ATOM    321  OG1 THR  40   11.639  35.687  54.986  1.000 36.24
ANISOU  321  OG1 THR  40    5158    3872    4740    -472   -136    660
ATOM    322  CG2 THR  40   13.771  34.669  54.659  1.000 34.29
ANISOU  322  CG2 THR  40    5268    3289    4470   -1303   2206    429
ATOM    323  N   ASP  41   10.524  33.635  57.346  1.000 28.20
ANISOU  323  N   ASP  41    2270    5223    3223    -711   -317   -479
ATOM    324  CA  ASP  41    9.324  33.604  58.191  1.000 25.10
ANISOU  324  CA  ASP  41    1935    4633    2968      13   -551    -505
ATOM    325  C   ASP  41    8.418  34.785  57.896  1.000 24.69
ANISOU  325  C   ASP  41    2686    3839    2855    -446   -749   -241
ATOM    326  O   ASP  41    7.219  34.846  58.163  1.000 24.79
ANISOU  326  O   ASP  41    2757    2721    3941     174   -584   -141
ATOM    327  CB  ASP  41    9.728  33.549  59.678  1.000 28.21
ANISOU  327  CB  ASP  41    2221    5503    2995     892   -594   -555
ATOM    328  CG  ASP  41    9.892  32.129  60.180  1.000 42.46
ANISOU  328  CG  ASP  41    6437    5911    3784   -1196  -1257    826
ATOM    329  OD1 ASP  41    9.705  31.161  59.401  1.000 55.96
ANISOU  329  OD1 ASP  41   12184    5138    3940   -2654    -82   1249
ATOM    330  OD2 ASP  41   10.214  31.951  61.383  1.000 61.55
ANISOU  330  OD2 ASP  41   10370    7470    5548   -4396  -4720   2309
ATOM    331  N   THR  42    8.991  35.807  57.305  1.000 29.30
ANISOU  331  N   THR  42    3761    4531    2839   -1404  -1089    -72
ATOM    332  CA  THR  42    8.255  36.976  56.863  1.000 33.69
ANISOU  332  CA  THR  42    4852    3472    4475   -1524   -819   -127
ATOM    333  C   THR  42    7.199  36.598  55.834  1.000 29.14
ANISOU  333  C   THR  42    3354    3051    4667     204   -648   -277
ATOM    334  O   THR  42    6.026  36.969  55.844  1.000 36.90
ANISOU  334  O   THR  42    3578    2980    7462     603   -176    643
ATOM    335  CB  THR  42    9.282  37.967  56.281  1.000 40.80
ANISOU  335  CB  THR  42    5831    4318    5354   -2254   -450     37
ATOM    336  OG1 THR  42   10.288  38.317  57.263  1.000 46.30
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ANISOU	336	OG1	THR	42	6998	3682	6912	-3163	-1478	177	
ATOM	337	CG2	THR	42	8.582	39.253	55.872	1.000	45.59		
ANISOU	337	CG2	THR	42	9083	3877	4363	-2166	-1048	238	
ATOM	338	N	GLU	43	7.573	35.773	54.862	1.000	31.74		
ANISOU	338	N	GLU	43	3380	4360	4319	-673	-223	-782	
ATOM	339	CA	GLU	43	6.647	35.355	53.810	1.000	35.40		
ANISOU	339	CA	GLU	43	4856	4683	3913	-1510	-860	329	
ATOM	340	C	GLU	43	5.643	34.324	54.330	1.000	28.03		
ANISOU	340	C	GLU	43	2988	3297	4363	-41	-919	168	
ATOM	341	O	GLU	43	4.560	34.138	53.764	1.000	38.18		
ANISOU	341	O	GLU	43	3818	2970	7717	-66	-2774	1469	
ATOM	342	CB	GLU	43	7.423	34.811	52.608	1.000	38.89		
ANISOU	342	CB	GLU	43	4464	6532	3779	-2546	-860	-393	
ATOM	343	CG	GLU	43	8.462	35.745	52.010	1.000	46.47		
ANISOU	343	CG	GLU	43	5175	7105	5377	-2936	-92	-289	
ATOM	344	CD	GLU	43	9.750	35.764	52.826	1.000	46.40		
ANISOU	344	CD	GLU	43	4506	7977	5145	-3155	548	-1210	
ATOM	345	OE1	GLU	43	9.775	36.447	53.880	1.000	55.20		
ANISOU	345	OE1	GLU	43	8741	7607	4627	-2062	-1002	-669	
ATOM	346	OE2	GLU	43	10.706	35.080	52.433	1.000	56.77		
ANISOU	346	OE2	GLU	43	4592	8930	8050	-2652	939	-1258	
ATOM	347	N	LEU	44	5.980	33.645	55.426	1.000	22.72		
ANISOU	347	N	LEU	44	2508	2161	3964	464	-476	-450	
ATOM	348	CA	LEU	44	5.117	32.592	55.959	1.000	26.76		
ANISOU	348	CA	LEU	44	4009	1973	4187	140	570	-986	
ATOM	349	CB	LEU	44	5.978	31.585	56.727	1.000	28.25		
ANISOU	349	CB	LEU	44	5094	2194	3448	-153	277	-562	
ATOM	350	CG	LEU	44	5.284	30.494	57.533	1.000	32.03		
ANISOU	350	CG	LEU	44	5971	2801	3398	-279	1192	-627	
ATOM	351	CD1	LEU	44	4.485	29.535	56.656	1.000	37.95		
ANISOU	351	CD1	LEU	44	7665	2239	4514	-1148	2039	-1403	
ATOM	352	CD2	LEU	44	6.302	29.703	58.361	1.000	36.97		
ANISOU	352	CD2	LEU	44	7096	2869	4080	1150	2171	186	
ATOM	353	C	LEU	44	4.000	33.145	56.841	1.000	31.10		
ANISOU	353	C	LEU	44	3835	3182	4800	-700	837	-2205	
ATOM	354	O	LEU	44	2.913	32.543	56.867	1.000	30.19		
ANISOU	354	O	LEU	44	4402	3299	3768	-1248	870	-2165	
ATOM	355	N	ALA	45	4.238	34.247	57.547	1.000	28.74		
ANISOU	355	N	ALA	45	2897	2938	5083	-562	710	-2061	
ATOM	356	CA	ALA	45	3.382	34.751	58.623	1.000	27.09		
ANISOU	356	CA	ALA	45	2716	2817	4761	-751	467	-2140	
ATOM	357	C	ALA	45	1.943	35.014	58.195	1.000	24.95		
ANISOU	357	C	ALA	45	2697	3110	3673	-784	709	-1257	
ATOM	358	O	ALA	45	1.021	34.515	58.875	1.000	22.50		
ANISOU	358	O	ALA	45	2762	2585	3201	-565	560	-1146	
ATOM	359	CB	ALA	45	3.975	36.005	59.248	1.000	36.30		
ANISOU	359	CB	ALA	45	3259	4219	6315	-1912	1332	-3404	
ATOM	360	N	SER	46	1.729	35.779	57.128	1.000	26.85		
ANISOU	360	N	SER	46	3258	3756	3187	-1732	618	-1184	
ATOM	361	CA	SER	46	0.380	36.052	56.642	1.000	24.97		
ANISOU	361	CA	SER	46	3686	3189	2611	-1223	511	-1105	
ATOM	362	CB	SER	46	0.422	36.950	55.392	1.000	32.35		
ANISOU	362	CB	SER	46	5428	3467	3395	-2232	70	-458	
ATOM	363	OG	SER	46	0.630	38.289	55.772	1.000	45.77		
ANISOU	363	OG	SER	46	7730	3349	6313	-2746	2499	-807	
ATOM	364	C	SER	46	-0.408	34.787	56.307	1.000	20.63		
ANISOU	364	C	SER	46	2797	2469	2572	-423	-151	-542	
ATOM	365	O	SER	46	-1.578	34.672	56.698	1.000	21.93		
ANISOU	365	O	SER	46	3120	2486	2725	-559	305	-403	
ATOM	366	N	ALA	47	0.211	33.855	55.590	1.000	22.39		
ANISOU	366	N	ALA	47	3096	2167	3244	-488	394	-368	

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ATOM    367  CA  ALA  47   -0.397  32.596  55.176  1.000 19.54
ANISOU  367  CA  ALA  47    2746    1863    2814    -289    362    -18
ATOM    368  CB  ALA  47    0.548  31.900  54.191  1.000 23.54
ANISOU  368  CB  ALA  47    3524    1717    3705    -617   1237   -159
ATOM    369  C   ALA  47   -0.715  31.714  56.381  1.000 19.95
ANISOU  369  C   ALA  47    2282    2546    2752    -327     19   257
ATOM    370  O   ALA  47   -1.836  31.199  56.518  1.000 19.66
ANISOU  370  O   ALA  47    2489    2589    2393    -614    211   -165
ATOM    371  N   LYS  48    0.270  31.558  57.268  1.000 18.24
ANISOU  371  N   LYS  48    2713    1966    2253    -210   -139   -912
ATOM    372  CA  LYS  48    0.042  30.782  58.486  1.000 19.33
ANISOU  372  CA  LYS  48    2398    2625    2321      43   -312   -563
ATOM    373  C   LYS  48   -1.110  31.329  59.322  1.000 20.57
ANISOU  373  C   LYS  48    2476    2556    2785    -326     83   -566
ATOM    374  O   LYS  48   -2.022  30.613  59.771  1.000 20.34
ANISOU  374  O   LYS  48    3207    2598    1923    -521    139   -340
ATOM    375  CB  LYS  48    1.352  30.758  59.294  1.000 24.61
ANISOU  375  CB  LYS  48    2400    3792    3158    -258   -556    -80
ATOM    376  CG  LYS  48    1.237  29.873  60.531  1.000 30.84
ANISOU  376  CG  LYS  48    4306    4044    3366    -291  -1504   277
ATOM    377  CD  LYS  48    1.837  30.575  61.736  1.000 41.45
ANISOU  377  CD  LYS  48    6742    5755    3251   -1067  -1382   -356
ATOM    378  CE  LYS  48    1.625  29.717  62.966  1.000 41.63
ANISOU  378  CE  LYS  48    6620    6124    3073    -466  -1047   -353
ATOM    379  NZ  LYS  48    1.074  30.497  64.112  1.000 42.62
ANISOU  379  NZ  LYS  48    5883    6866    3444     460  -1193   -425
ATOM    380  N   ASP  49   -1.110  32.625  59.607  1.000 19.18
ANISOU  380  N   ASP  49    2348    2602    2337    -464    100   -806
ATOM    381  CA  ASP  49   -2.127  33.243  60.433  1.000 21.95
ANISOU  381  CA  ASP  49    2555    2986    2801    -791    617  -1035
ATOM    382  CB  ASP  49   -1.868  34.756  60.611  1.000 23.97
ANISOU  382  CB  ASP  49    2827    2872    3409    -250    -79  -1325
ATOM    383  CG  ASP  49   -0.681  35.078  61.492  1.000 25.41
ANISOU  383  CG  ASP  49    2787    3405    3464    -365    113  -1866
ATOM    384  OD1 ASP  49   -0.153  34.153  62.143  1.000 30.75
ANISOU  384  OD1 ASP  49    3572    4181    3932    -254    -967  -1667
ATOM    385  OD2 ASP  49   -0.235  36.256  61.563  1.000 30.78
ANISOU  385  OD2 ASP  49    3303    3649    4742    -710    344  -2413
ATOM    386  C   ASP  49   -3.543  33.061  59.904  1.000 21.44
ANISOU  386  C   ASP  49    2465    2651    3030    -388    540   -900
ATOM    387  O   ASP  49   -4.476  32.770  60.654  1.000 20.72
ANISOU  387  O   ASP  49    2346    2181    3347    -279    550   -726
ATOM    388  N   LEU  50   -3.731  33.269  58.596  1.000 23.28
ANISOU  388  N   LEU  50    2942    2712    3191   -1251    216   -644
ATOM    389  CA  LEU  50   -5.086  33.185  58.068  1.000 22.94
ANISOU  389  CA  LEU  50    3104    1796    3815    -575   -205  -1079
ATOM    390  CB  LEU  50   -5.204  33.861  56.696  1.000 28.78
ANISOU  390  CB  LEU  50    3948    2453    4535    -852   -755   -254
ATOM    391  CG  LEU  50   -6.620  34.246  56.260  1.000 25.30
ANISOU  391  CG  LEU  50    3800    2294    3520     30   325   -531
ATOM    392  CD1 LEU  50   -7.552  34.478  57.441  1.000 44.77
ANISOU  392  CD1 LEU  50    6382    4432    6196    -475   3026  -1060
ATOM    393  CD2 LEU  50   -6.625  35.485  55.385  1.000 32.52
ANISOU  393  CD2 LEU  50    5861    1962    4533     752    354   -433
ATOM    394  C   LEU  50   -5.566  31.737  57.982  1.000 21.12
ANISOU  394  C   LEU  50    2559    1870    3595    -643    742  -1270
ATOM    395  O   LEU  50   -6.772  31.494  58.175  1.000 21.13
ANISOU  395  O   LEU  50    2491    2457    3083    -543    579  -1097
ATOM    396  N   VAL  51   -4.681  30.769  57.715  1.000 16.27
ANISOU  396  N   VAL  51    2517    1843    1823    -302     -3   -646
ATOM    397  CA  VAL  51   -5.186  29.370  57.701  1.000 18.07
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ANISOU	397	CA	VAL	51	3154	1763	1947	-401	-15	-427
ATOM	398	CB	VAL	51	-4.281	28.415	56.889	1.000	16.07	
ANISOU	398	CB	VAL	51	2981	1629	1496	-621	-255	-501
ATOM	399	CG1	VAL	51	-3.002	28.114	57.668	1.000	18.99	
ANISOU	399	CG1	VAL	51	2959	2382	1875	-383	-100	302
ATOM	400	CG2	VAL	51	-5.006	27.119	56.497	1.000	22.16	
ANISOU	400	CG2	VAL	51	4569	2121	1728	-1393	64	-869
ATOM	401	C	VAL	51	-5.446	28.899	59.114	1.000	17.74	
ANISOU	401	C	VAL	51	2508	2223	2009	-435	142	-445
ATOM	402	O	VAL	51	-6.430	28.187	59.346	1.000	19.76	
ANISOU	402	O	VAL	51	3005	2160	2345	-692	726	-1021
ATOM	403	N	ILE	52	-4.671	29.263	60.125	1.000	20.23	
ANISOU	403	N	ILE	52	2980	2945	1760	-649	364	-902
ATOM	404	CA	ILE	52	-4.990	28.875	61.507	1.000	20.17	
ANISOU	404	CA	ILE	52	3200	2665	1800	-758	627	-1134
ATOM	405	CB	ILE	52	-3.847	29.230	62.469	1.000	21.31	
ANISOU	405	CB	ILE	52	3294	3151	1652	-449	462	-1043
ATOM	406	CG2	ILE	52	-4.238	29.178	63.931	1.000	21.29	
ANISOU	406	CG2	ILE	52	3543	2826	1719	-362	529	-689
ATOM	407	CG1	ILE	52	-2.619	28.346	62.217	1.000	25.37	
ANISOU	407	CG1	ILE	52	3213	3819	2608	-307	727	-1090
ATOM	408	CD1	ILE	52	-2.871	26.872	62.470	1.000	28.56	
ANISOU	408	CD1	ILE	52	3474	3578	3798	106	178	-1110
ATOM	409	C	ILE	52	-6.284	29.514	61.950	1.000	22.44	
ANISOU	409	C	ILE	52	3119	3216	2190	-710	645	-1228
ATOM	410	O	ILE	52	-7.072	28.856	62.647	1.000	23.23	
ANISOU	410	O	ILE	52	3390	3654	1781	-766	758	-1246
ATOM	411	N	ASP	53	-6.519	30.754	61.530	1.000	23.33	
ANISOU	411	N	ASP	53	2897	3064	2903	-626	700	-1361
ATOM	412	CA	ASP	53	-7.826	31.335	61.897	1.000	24.49	
ANISOU	412	CA	ASP	53	2818	3347	3141	-759	781	-1545
ATOM	413	CB	ASP	53	-7.942	32.781	61.411	1.000	27.43	
ANISOU	413	CB	ASP	53	2854	3335	4235	-434	819	-1446
ATOM	414	CG	ASP	53	-9.309	33.397	61.570	1.000	30.99	
ANISOU	414	CG	ASP	53	3166	4281	4326	36	1242	-1214
ATOM	415	OD1	ASP	53	-9.657	33.779	62.705	1.000	37.26	
ANISOU	415	OD1	ASP	53	4369	4569	5220	153	1263	-2733
ATOM	416	OD2	ASP	53	-10.050	33.491	60.553	1.000	38.45	
ANISOU	416	OD2	ASP	53	3393	6043	5173	810	557	-1648
ATOM	417	C	ASP	53	-8.953	30.495	61.316	1.000	24.64	
ANISOU	417	C	ASP	53	3028	3701	2634	-919	372	-1031
ATOM	418	O	ASP	53	-10.011	30.327	61.915	1.000	28.52	
ANISOU	418	O	ASP	53	3399	3835	3603	-1519	962	-2151
ATOM	419	N	PHE	54	-8.744	29.978	60.108	1.000	22.04	
ANISOU	419	N	PHE	54	2921	2974	2479	-573	174	-704
ATOM	420	CA	PHE	54	-9.772	29.187	59.432	1.000	19.99	
ANISOU	420	CA	PHE	54	2253	2879	2463	-421	771	-978
ATOM	421	CB	PHE	54	-9.423	29.030	57.942	1.000	18.45	
ANISOU	421	CB	PHE	54	2856	1983	2171	-65	426	-518
ATOM	422	CG	PHE	54	-10.493	28.292	57.145	1.000	21.36	
ANISOU	422	CG	PHE	54	3063	2735	2318	-646	599	-627
ATOM	423	CD1	PHE	54	-11.714	28.906	56.933	1.000	23.18	
ANISOU	423	CD1	PHE	54	3199	2783	2826	-703	-29	-624
ATOM	424	CD2	PHE	54	-10.293	27.035	56.619	1.000	23.32	
ANISOU	424	CD2	PHE	54	3482	2802	2577	-689	212	-858
ATOM	425	CE1	PHE	54	-12.719	28.291	56.241	1.000	26.45	
ANISOU	425	CE1	PHE	54	3345	3696	3008	-1418	129	-554
ATOM	426	CE2	PHE	54	-11.303	26.375	55.921	1.000	25.65	
ANISOU	426	CE2	PHE	54	3750	3815	2182	-1404	607	-1005
ATOM	427	CZ	PHE	54	-12.522	27.013	55.725	1.000	26.17	
ANISOU	427	CZ	PHE	54	3433	3830	2679	-1829	298	-813

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ATOM    428  C   PHE  54    -9.959  27.854  60.132  1.000 19.44
ANISOU  428  C   PHE  54     2340    3430    1617     -834  319  -759
ATOM    429  O   PHE  54   -11.087  27.450  60.386  1.000 22.11
ANISOU  429  O   PHE  54     2601    3066    2734     -948 1018 -1466
ATOM    430  N   PHE  55    -8.882  27.166  60.448  1.000 20.59
ANISOU  430  N   PHE  55     2728    3375    1720     -666  180  -611
ATOM    431  CA  PHE  55    -8.966  25.927  61.212  1.000 22.59
ANISOU  431  CA  PHE  55     3092    3671    1820     -728  381  -372
ATOM    432  CB  PHE  55    -7.579  25.360  61.478  1.000 21.93
ANISOU  432  CB  PHE  55     3163    3622    1549     -692  287  -158
ATOM    433  CG  PHE  55    -6.790  24.833  60.284  1.000 20.60
ANISOU  433  CG  PHE  55     3034    2998    1793    -1004  365  -375
ATOM    434  CD1 PHE  55    -7.352  24.526  59.057  1.000 18.72
ANISOU  434  CD1 PHE  55     2300    3095    1717    -1078  586  -271
ATOM    435  CD2 PHE  55    -5.430  24.615  60.385  1.000 18.06
ANISOU  435  CD2 PHE  55     3132    2490    1241     -926  128  -497
ATOM    436  CE1 PHE  55    -6.609  24.037  58.014  1.000 18.92
ANISOU  436  CE1 PHE  55     2455    2761    1971     -844  436  -542
ATOM    437  CE2 PHE  55    -4.672  24.124  59.352  1.000 18.58
ANISOU  437  CE2 PHE  55     3291    2606    1163     -478   63  -299
ATOM    438  CZ  PHE  55    -5.256  23.814  58.134  1.000 17.68
ANISOU  438  CZ  PHE  55     2660    2567    1490     -380  129  -806
ATOM    439  C   PHE  55    -9.684  26.111  62.546  1.000 24.99
ANISOU  439  C   PHE  55     3310    4138    2046     -830  647  -415
ATOM    440  O   PHE  55   -10.532  25.281  62.872  1.000 30.29
ANISOU  440  O   PHE  55     3802    4943    2763    -1527 1314 -1102
ATOM    441  N   GLU  56    -9.330  27.144  63.311  1.000 23.65
ANISOU  441  N   GLU  56     2864    4109    2013     -634  937  -525
ATOM    442  CA  GLU  56    -9.868  27.355  64.636  1.000 30.01
ANISOU  442  CA  GLU  56     3632    5378    2394    -1050 1465 -994
ATOM    443  CB  GLU  56    -8.998  28.333  65.436  1.000 36.40
ANISOU  443  CB  GLU  56     4531    6933    2367    -1606 1318 -1623
ATOM    444  CG  GLU  56    -7.666  27.827  65.916  1.000 41.89
ANISOU  444  CG  GLU  56     5006    8196    2713    -1457  404 -1900
ATOM    445  CD  GLU  56    -6.787  28.880  66.575  1.000 48.94
ANISOU  445  CD  GLU  56     6081    9310    3202    -2278  -73 -2062
ATOM    446  OE1 GLU  56    -5.694  28.515  67.078  1.000 60.73
ANISOU  446  OE1 GLU  56     8034   12274    2769    -3208 -2335  266
ATOM    447  OE2 GLU  56    -7.145  30.084  66.614  1.000 58.51
ANISOU  447  OE2 GLU  56     8742    9338    4151    -2088 1096 -3951
ATOM    448  C   GLU  56   -11.289  27.920  64.617  1.000 30.60
ANISOU  448  C   GLU  56     3764    4923    2941     -977 1967 -1271
ATOM    449  O   GLU  56   -12.058  27.542  65.504  1.000 35.21
ANISOU  449  O   GLU  56     4384    5304    3690    -1136 2652 -1235
ATOM    450  N   HIS  57   -11.603  28.805  63.673  1.000 30.00
ANISOU  450  N   HIS  57     3730    4846    2823     -654 1684 -1582
ATOM    451  CA  HIS  57   -12.854  29.559  63.759  1.000 33.51
ANISOU  451  CA  HIS  57     3853    5101    3778     -519 1673 -1911
ATOM    452  CB  HIS  57   -12.536  31.046  63.991  1.000 33.40
ANISOU  452  CB  HIS  57     3844    5183    3664     -411 1546 -2250
ATOM    453  CG  HIS  57   -11.577  31.344  65.095  1.000 35.13
ANISOU  453  CG  HIS  57     4497    5409    3444     -505 1340 -1992
ATOM    454  CD2 HIS  57   -10.361  31.946  65.071  1.000 35.26
ANISOU  454  CD2 HIS  57     4837    5214    3345     -834  637 -1456
ATOM    455  ND1 HIS  57   -11.819  31.021  66.411  1.000 40.52
ANISOU  455  ND1 HIS  57     6021    5885    3490    -1360 1474 -2002
ATOM    456  CE1 HIS  57   -10.798  31.410  67.151  1.000 42.28
ANISOU  456  CE1 HIS  57     6680    6066    3320    -1632 1099 -1772
ATOM    457  NE2 HIS  57    -9.902  31.970  66.362  1.000 41.69
ANISOU  457  NE2 HIS  57     6377    6133    3329    -1817  407 -1148
ATOM    458  C   HIS  57   -13.769  29.466  62.547  1.000 32.58
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ANISOU	458	C	HIS	57	3083	5097	4199	-729	1723	-2066	
ATOM	459	O	HIS	57	-14.902	29.965	62.578	1.000	33.80		
ANISOU	459	O	HIS	57	3121	5097	4625	-731	1865	-2565	
ATOM	460	N	GLY	58	-13.370	28.866	61.432	1.000	28.78		
ANISOU	460	N	GLY	58	2841	4353	3742	-253	1341	-1506	
ATOM	461	CA	GLY	58	-14.326	28.685	60.332	1.000	26.99		
ANISOU	461	CA	GLY	58	2471	3916	3869	24	1298	-1173	
ATOM	462	C	GLY	58	-15.447	27.737	60.738	1.000	29.94		
ANISOU	462	C	GLY	58	2665	4357	4353	-261	1323	-1058	
ATOM	463	O	GLY	58	-15.241	26.805	61.534	1.000	29.23		
ANISOU	463	O	GLY	58	2976	4044	4087	-571	1192	-1297	
ATOM	464	N	SER	59	-16.635	27.958	60.193	1.000	27.61		
ANISOU	464	N	SER	59	2556	3905	4029	-108	1461	-1767	
ATOM	465	CA	SER	59	-17.812	27.153	60.497	1.000	28.42		
ANISOU	465	CA	SER	59	2675	4074	4049	-189	1294	-1325	
ATOM	466	CB	SER	59	-19.121	27.889	60.162	1.000	28.29		
ANISOU	466	CB	SER	59	2556	4574	3618	-339	1198	-928	
ATOM	467	OG	SER	59	-19.229	27.978	58.739	1.000	28.66		
ANISOU	467	OG	SER	59	3598	3742	3547	166	1729	-867	
ATOM	468	C	SER	59	-17.795	25.843	59.724	1.000	29.57		
ANISOU	468	C	SER	59	3467	3990	3779	-646	1463	-1206	
ATOM	469	O	SER	59	-16.990	25.651	58.810	1.000	22.72		
ANISOU	469	O	SER	59	3054	3042	2537	-144	648	-369	
ATOM	470	N	GLU	60	-18.698	24.939	60.103	1.000	26.90		
ANISOU	470	N	GLU	60	2413	3900	3907	-69	1079	-853	
ATOM	471	CA	GLU	60	-18.699	23.684	59.359	1.000	26.98		
ANISOU	471	CA	GLU	60	2699	3515	4037	-98	709	-537	
ATOM	472	CB	GLU	60	-19.646	22.681	60.001	1.000	39.11		
ANISOU	472	CB	GLU	60	5393	4393	5075	-1361	908	364	
ATOM	473	CG	GLU	60	-19.011	21.665	60.917	1.000	44.63		
ANISOU	473	CG	GLU	60	5606	5473	5878	-977	1079	1219	
ATOM	474	CD	GLU	60	-17.507	21.543	60.797	1.000	48.52		
ANISOU	474	CD	GLU	60	5714	6217	6503	-390	1207	877	
ATOM	475	OE1	GLU	60	-17.030	21.223	59.684	1.000	48.11		
ANISOU	475	OE1	GLU	60	5349	7545	5384	709	366	1951	
ATOM	476	OE2	GLU	60	-16.828	21.763	61.829	1.000	46.50		
ANISOU	476	OE2	GLU	60	4926	5742	7000	1158	1550	-1504	
ATOM	477	C	GLU	60	-19.091	23.960	57.915	1.000	25.30		
ANISOU	477	C	GLU	60	2829	2728	4055	86	725	-656	
ATOM	478	O	GLU	60	-18.529	23.346	57.027	1.000	24.18		
ANISOU	478	O	GLU	60	2119	2980	4091	-202	741	-752	
ATOM	479	N	ALA	61	-20.032	24.890	57.716	1.000	25.58		
ANISOU	479	N	ALA	61	2083	3206	4432	-34	612	-774	
ATOM	480	CA	ALA	61	-20.495	25.212	56.368	1.000	24.05		
ANISOU	480	CA	ALA	61	1838	2999	4301	228	720	-1055	
ATOM	481	CB	ALA	61	-21.670	26.176	56.459	1.000	27.53		
ANISOU	481	CB	ALA	61	2807	1857	5797	394	704	-606	
ATOM	482	C	ALA	61	-19.385	25.790	55.500	1.000	27.31		
ANISOU	482	C	ALA	61	3170	2572	4633	-377	1178	-1026	
ATOM	483	O	ALA	61	-19.247	25.467	54.311	1.000	22.29		
ANISOU	483	O	ALA	61	2363	1876	4232	42	661	-319	
ATOM	484	N	GLU	62	-18.580	26.642	56.118	1.000	22.18		
ANISOU	484	N	GLU	62	2075	2258	4094	396	569	-394	
ATOM	485	CA	GLU	62	-17.455	27.258	55.416	1.000	24.19		
ANISOU	485	CA	GLU	62	2401	2603	4188	150	852	-590	
ATOM	486	CB	GLU	62	-16.806	28.354	56.277	1.000	24.68		
ANISOU	486	CB	GLU	62	2401	2490	4485	91	1273	-828	
ATOM	487	CG	GLU	62	-17.641	29.636	56.356	1.000	25.19		
ANISOU	487	CG	GLU	62	2542	2620	4409	353	421	-685	
ATOM	488	CD	GLU	62	-17.288	30.581	57.480	1.000	29.27		
ANISOU	488	CD	GLU	62	3284	2991	4845	621	515	-1290	

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ATOM    489  OE1 GLU  62   -16.527 30.241  58.410  1.000 30.11
ANISOU  489  OE1 GLU  62    3231    3067    5143     318    56  -1639
ATOM    490  OE2 GLU  62   -17.796 31.739  57.436  1.000 35.30
ANISOU  490  OE2 GLU  62    4832    2994    5584     863    109  -1327
ATOM    491  C   GLU  62   -16.409 26.226  55.025  1.000 21.70
ANISOU  491  C   GLU  62    2394    2421    3430     30 784  -579
ATOM    492  O   GLU  62   -15.818 26.218  53.940  1.000 19.44
ANISOU  492  O   GLU  62    2095    2140    3153    -301   467  -604
ATOM    493  N   LYS  63   -16.184 25.308  55.972  1.000 20.08
ANISOU  493  N   LYS  63    2472    2266    2893     -74   761  -902
ATOM    494  CA  LYS  63   -15.246 24.227  55.678  1.000 19.73
ANISOU  494  CA  LYS  63    2322    2559    2614     133   429  -903
ATOM    495  CB  LYS  63   -14.934 23.497  56.988  1.000 18.48
ANISOU  495  CB  LYS  63    1803    2743    2476    -218   587  -836
ATOM    496  CG  LYS  63   -13.946 24.240  57.881  1.000 19.17
ANISOU  496  CG  LYS  63    2115    2332    2836    -296   325  -674
ATOM    497  CD  LYS  63   -13.839 23.651  59.290  1.000 26.23
ANISOU  497  CD  LYS  63    2978    4084    2902    -888  -177  -287
ATOM    498  CE  LYS  63   -12.753 24.383  60.068  1.000 27.75
ANISOU  498  CE  LYS  63    3074    5008    2461   -1239   500  -1082
ATOM    499  NZ  LYS  63   -12.929 24.378  61.530  1.000 34.95
ANISOU  499  NZ  LYS  63    3177    7579    2524   -2594   840  -894
ATOM    500  C   LYS  63   -15.789 23.304  54.586  1.000 17.52
ANISOU  500  C   LYS  63    2014    2191    2453     51 529  -691
ATOM    501  O   LYS  63   -15.025 22.953  53.654  1.000 17.58
ANISOU  501  O   LYS  63    2266    1709    2704     158    707  -653
ATOM    502  N   ARG  64   -17.069 22.912  54.641  1.000 19.63
ANISOU  502  N   ARG  64    2081    2452    2926      -14   614  -592
ATOM    503  CA  ARG  64   -17.618 22.041  53.595  1.000 19.00
ANISOU  503  CA  ARG  64    1509    2526    3185    -3 620  -652
ATOM    504  C   ARG  64   -17.471 22.634  52.194  1.000 20.42
ANISOU  504  C   ARG  64    2165    2436    3157     -390   -22  -536
ATOM    505  O   ARG  64   -17.204 21.934  51.195  1.000 18.83
ANISOU  505  O   ARG  64    1854    2184    3115    -434   575  -201
ATOM    506  CB  ARG  64   -19.080 21.670  53.871  1.000 24.70
ANISOU  506  CB  ARG  64    1470    3652    4263     -51   841  -909
ATOM    507  CG  ARG  64   -19.838 20.933  52.795  1.000 36.49
ANISOU  507  CG  ARG  64    2961    5284    5621    -2020   138  -882
ATOM    508  CD  ARG  64   -21.315 20.645  53.095  1.000 46.32
ANISOU  508  CD  ARG  64    3034    6962    7603    -2438   327  -1187
ATOM    509  NE  ARG  64   -21.776 21.216  54.331  1.000 55.81
ANISOU  509  NE  ARG  64    3917    8636    8652    -3960  2222  -1870
ATOM    510  CZ  ARG  64   -22.814 21.840  54.811  1.000 58.82
ANISOU  510  CZ  ARG  64    4438    8939    8972    -3479  1988  -2480
ATOM    511  NH1 ARG  64   -23.884 22.106  54.071  1.000 76.83
ANISOU  511  NH1 ARG  64    6024    9527   13641    -1787  -165  -1872
ATOM    512  NH2 ARG  64   -22.797 22.213  56.093  1.000 69.53
ANISOU  512  NH2 ARG  64    7792    9201    9424    -5884  3891  -3304
ATOM    513  N   ALA  65   -17.621 23.947  52.066  1.000 20.43
ANISOU  513  N   ALA  65    1689    2554    3519     24 612  -525
ATOM    514  CA  ALA  65   -17.505 24.656  50.782  1.000 19.45
ANISOU  514  CA  ALA  65    1649    2216    3523     409   184  -553
ATOM    515  CB  ALA  65   -17.912 26.108  50.984  1.000 23.73
ANISOU  515  CB  ALA  65    1420    2019    5579     126  -373  -742
ATOM    516  C   ALA  65   -16.118 24.549  50.168  1.000 17.89
ANISOU  516  C   ALA  65    1524    2099    3173     -47   108  -101
ATOM    517  O   ALA  65   -15.983 24.732  48.954  1.000 18.77
ANISOU  517  O   ALA  65    1830    2178    3123     122    -8  -229
ATOM    518  N   VAL  66   -15.100 24.248  50.973  1.000 17.99
ANISOU  518  N   VAL  66    1547    2151    3137     -86    36  -196
ATOM    519  CA  VAL  66   -13.746 24.066  50.430  1.000 16.74
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ANISOU	519	CA	VAL	66	1553	1859	2948	-62	-56 -254
ATOM	520	CB	VAL	66	-12.775	25.151	50.951	1.000	17.29
ANISOU	520	CB	VAL	66	1805	1804	2963	-330	338 -185
ATOM	521	CG1	VAL	66	-13.238	26.532	50.455	1.000	16.70
ANISOU	521	CG1	VAL	66	1547	1800	2997	111	545 -553
ATOM	522	CG2	VAL	66	-12.652	25.180	52.462	1.000	18.65
ANISOU	522	CG2	VAL	66	2053	1996	3036	-193	17 -538
ATOM	523	C	VAL	66	-13.201	22.680	50.724	1.000	15.66
ANISOU	523	C	VAL	66	1775	1813	2362	-70	-250 -457
ATOM	524	O	VAL	66	-11.972	22.493	50.808	1.000	14.19
ANISOU	524	O	VAL	66	1747	1576	2069	-122	-56 -347
ATOM	525	N	THR	67	-14.071	21.695	50.873	1.000	14.46
ANISOU	525	N	THR	67	1550	1602	2343	126	-48 -722
ATOM	526	CA	THR	67	-13.723	20.279	51.000	1.000	14.06
ANISOU	526	CA	THR	67	1461	1698	2185	234	5 -740
ATOM	527	CB	THR	67	-14.419	19.647	52.225	1.000	15.08
ANISOU	527	CB	THR	67	1721	1955	2053	-51	-426 -444
ATOM	528	OG1	THR	67	-14.089	20.337	53.453	1.000	17.41
ANISOU	528	OG1	THR	67	2538	1949	2128	-39	70 -716
ATOM	529	CG2	THR	67	-13.915	18.215	52.420	1.000	16.63
ANISOU	529	CG2	THR	67	2182	1888	2248	148	293 -658
ATOM	530	C	THR	67	-14.067	19.518	49.728	1.000	12.37
ANISOU	530	C	THR	67	1144	1422	2132	209	-95 -517
ATOM	531	O	THR	67	-15.208	19.567	49.229	1.000	14.82
ANISOU	531	O	THR	67	1197	2086	2350	208	-168 -362
ATOM	532	N	SER	68	-13.092	18.790	49.180	1.000	11.61
ANISOU	532	N	SER	68	1109	1421	1881	37	-58 -534
ATOM	533	CA	SER	68	-13.306	17.955	48.003	1.000	11.45
ANISOU	533	CA	SER	68	1274	1444	1631	-49	-30 -374
ATOM	534	CB	SER	68	-12.027	17.317	47.480	1.000	11.88
ANISOU	534	CB	SER	68	1446	1523	1544	79	252 -157
ATOM	535	OG	SER	68	-11.026	18.292	47.239	1.000	16.95
ANISOU	535	OG	SER	68	1557	2314	2569	-336	389 -218
ATOM	536	C	SER	68	-14.269	16.815	48.319	1.000	11.56
ANISOU	536	C	SER	68	1287	1375	1732	-61	53 -406
ATOM	537	O	SER	68	-14.308	16.384	49.476	1.000	14.62
ANISOU	537	O	SER	68	1998	1860	1697	-538	153 -430
ATOM	538	N	PRO	69	-15.026	16.324	47.344	1.000	12.78
ANISOU	538	N	PRO	69	1476	1473	1905	-243	-88 -194
ATOM	539	CD	PRO	69	-15.130	16.801	45.953	1.000	12.47
ANISOU	539	CD	PRO	69	1022	1808	1909	-199	-203 -144
ATOM	540	CA	PRO	69	-15.941	15.214	47.639	1.000	12.21
ANISOU	540	CA	PRO	69	1358	1369	1913	-178	148 -437
ATOM	541	CB	PRO	69	-16.825	15.193	46.355	1.000	13.94
ANISOU	541	CB	PRO	69	1362	1591	2343	-251	-178 -14
ATOM	542	CG	PRO	69	-15.924	15.715	45.290	1.000	14.38
ANISOU	542	CG	PRO	69	1396	1947	2122	-554	-511 178
ATOM	543	C	PRO	69	-15.270	13.882	47.912	1.000	13.25
ANISOU	543	C	PRO	69	1206	1526	2303	-217	-115 -100
ATOM	544	O	PRO	69	-15.932	12.985	48.481	1.000	14.01
ANISOU	544	O	PRO	69	1753	1450	2122	-373	99 -301
ATOM	545	N	VAL	70	-14.015	13.692	47.554	1.000	13.46
ANISOU	545	N	VAL	70	1288	1479	2348	-174	-108 -265
ATOM	546	CA	VAL	70	-13.184	12.548	47.898	1.000	13.49
ANISOU	546	CA	VAL	70	1404	1692	2030	37	138 -195
ATOM	547	CB	VAL	70	-12.587	11.720	46.737	1.000	16.39
ANISOU	547	CB	VAL	70	2142	1648	2439	-225	614 -452
ATOM	548	CG1	VAL	70	-13.615	10.756	46.208	1.000	33.50
ANISOU	548	CG1	VAL	70	6470	2984	3274	-2702	41 -867
ATOM	549	CG2	VAL	70	-11.995	12.613	45.640	1.000	16.46
ANISOU	549	CG2	VAL	70	1749	2234	2273	269	444 2 3

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ATOM    550  C   VAL  70   -12.042  13.057  48.782  1.000 13.59
ANISOU  550  C   VAL  70     1618    1382    2163     -38   -114  1  2  7
ATOM    551  O   VAL  70   -11.426  14.105  48.493  1.000 14.20
ANISOU  551  O   VAL  70     1748    1685    1964    -265    26  1  8  2
ATOM    552  N   PRO  71   -11.786  12.365  49.898  1.000 14.21
ANISOU  552  N   PRO  71     1607    1507    2285    -115   -62   3  1  0
ATOM    553  CD  PRO  71   -12.432  11.125  50.378  1.000 14.70
ANISOU  553  CD  PRO  71     1920    1590    2076    -201   646   4
ATOM    554  CA  PRO  71   -10.830  12.919  50.878  1.000 17.41
ANISOU  554  CA  PRO  71     2429    2008    2178    -522  -342  4  1  8
ATOM    555  CB  PRO  71   -11.338  12.304  52.193  1.000 20.87
ANISOU  555  CB  PRO  71     3768    2082    2081    -743   190   1   4
ATOM    556  CG  PRO  71   -11.908  10.989  51.775  1.000 18.28
ANISOU  556  CG  PRO  71     3534    1665    1746    -338   781   -  5  4
ATOM    557  C   PRO  71    -9.384  12.543  50.619  1.000 17.14
ANISOU  557  C   PRO  71     2183    2304    2026    -684  -815  4   4
ATOM    558  O   PRO  71    -8.730  11.796  51.330  1.000 20.54
ANISOU  558  O   PRO  71     2745    2610    2448     -87   -404  4  1  4
ATOM    559  N   THR  72    -8.834  13.111  49.556  1.000 16.59
ANISOU  559  N   THR  72     2156    2046    2103    -235   -508  -  1  7
ATOM    560  CA  THR  72    -7.496  12.818  49.090  1.000 17.43
ANISOU  560  CA  THR  72     2113    1884    2626    -254   -510  -  2  8  8
ATOM    561  CB  THR  72    -7.477  12.829  47.545  1.000 15.98
ANISOU  561  CB  THR  72     1700    1761    2611     211   -458  -  4  2  1
ATOM    562  OG1 THR  72    -8.027  14.094  47.128  1.000 17.28
ANISOU  562  OG1 THR  72     2146    1553    2868     27  -355   -  2  7  1
ATOM    563  CG2 THR  72    -8.348  11.764  46.929  1.000 12.63
ANISOU  563  CG2 THR  72     1296    1581    1923     -46   328   -  1  2  7
ATOM    564  C   THR  72    -6.418  13.805  49.549  1.000 17.83
ANISOU  564  C   THR  72     2153    1773    2847    -155  -1228  2  3  2
ATOM    565  O   THR  72    -5.216  13.536  49.329  1.000 20.17
ANISOU  565  O   THR  72     2142    2265    3257    -225  -1049  4  8  0
ATOM    566  N   MET  73    -6.785  14.920  50.169  1.000 19.43
ANISOU  566  N   MET  73     2876    2052    2455    -782  -451  -  1  4  4
ATOM    567  CA  MET  73    -5.799  15.944  50.521  1.000 18.75
ANISOU  567  CA  MET  73     2117    2326    2682    -538  -466  -  2  8  0
ATOM    568  CB  MET  73    -4.758  15.338  51.480  1.000 22.03
ANISOU  568  CB  MET  73     1826    2825    3718    -377  -306  5  9  5
ATOM    569  CG  MET  73    -5.374  15.059  52.843  1.000 27.01
ANISOU  569  CG  MET  73     3545    2853    3864     -84   -87   1  5  2  6
ATOM    570  SD  MET  73    -4.107  14.850  54.107  1.000 32.23
ANISOU  570  SD  MET  73     4364    4245    3637     469   -400  5  8  3
ATOM    571  CE  MET  73    -3.179  13.492  53.374  1.000 26.74
ANISOU  571  CE  MET  73     2885    4895    2381     326   425   1  3  4  8
ATOM    572  C   MET  73    -5.066  16.582  49.355  1.000 17.20
ANISOU  572  C   MET  73     1338    2129    3067     -20  -269  -  1  7  5
ATOM    573  O   MET  73    -3.945  17.110  49.498  1.000 21.20
ANISOU  573  O   MET  73     1713    2512    3832    -541   51  -  1  0  2  4
ATOM    574  N   ARG  74    -5.630  16.600  48.175  1.000 18.64
ANISOU  574  N   ARG  74     1881    2051    3150     84  -461   5  4  3
ATOM    575  CA  ARG  74    -5.091  17.180  46.967  1.000 15.73
ANISOU  575  CA  ARG  74      937 1986     3053     169    27  -  1  7  4
ATOM    576  CB  ARG  74    -5.655  16.537  45.704  1.000 16.53
ANISOU  576  CB  ARG  74     1711    1434    3137     -263   142  -  1  6  0
ATOM    577  CG  ARG  74    -4.911  16.934  44.440  1.000 15.01
ANISOU  577  CG  ARG  74     1270    1288    3144     -156   279  -  5  5  4
ATOM    578  CD  ARG  74    -5.683  16.543  43.185  1.000 16.10
ANISOU  578  CD  ARG  74     1967    1031    3120     268   -92  -  4  0  7
ATOM    579  NE  ARG  74    -4.902  16.816  41.966  1.000 18.81
ANISOU  579  NE  ARG  74     2259    1813    3075     -432  -252  -  2  9  6
ATOM    580  CZ  ARG  74    -5.033  17.824  41.130  1.000 16.64
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ANISOU	580	CZ	ARG	74	1968	1646	2709	-141	-190	-596
ATOM	581	NH1	ARG	74	-5.951	18.775	41.293	1.000	20.09	
ANISOU	581	NH1	ARG	74	1899	2075	3660	54	-353	-788
ATOM	582	NH2	ARG	74	-4.220	17.896	40.068	1.000	20.12	
ANISOU	582	NH2	ARG	74	2366	2844	2437	153	-196	-400
ATOM	583	C	ARG	74	-5.373	18.681	46.966	1.000	12.70	
ANISOU	583	C	ARG	74	1187	1880	1758	6	-22	-136
ATOM	584	O	ARG	74	-4.501	19.465	46.582	1.000	14.07	
ANISOU	584	O	ARG	74	1049	2048	2247	-221	-170	-480
ATOM	585	N	ARG	75	-6.567	19.099	47.387	1.000	12.72	
ANISOU	585	N	ARG	75	1402	1702	1728	95	182	-108
ATOM	586	CA	ARG	75	-7.006	20.471	47.308	1.000	13.40	
ANISOU	586	CA	ARG	75	1924	1618	1548	87	275	-193
ATOM	587	CB	ARG	75	-7.737	20.784	45.995	1.000	13.45	
ANISOU	587	CB	ARG	75	1972	1387	1751	-179	51	- 9
ATOM	588	CG	ARG	75	-6.908	20.637	44.721	1.000	13.38	
ANISOU	588	CG	ARG	75	1638	1851	1594	78	-217	101
ATOM	589	CD	ARG	75	-5.849	21.708	44.582	1.000	12.85	
ANISOU	589	CD	ARG	75	1537	1602	1741	237	62	-15
ATOM	590	NE	ARG	75	-5.087	21.685	43.347	1.000	13.71	
ANISOU	590	NE	ARG	75	1708	1797	1705	188	90	- 91
ATOM	591	CZ	ARG	75	-3.984	21.036	43.013	1.000	12.46	
ANISOU	591	CZ	ARG	75	1348	1656	1731	-89	86	117
ATOM	592	NH1	ARG	75	-3.418	20.241	43.894	1.000	14.64	
ANISOU	592	NH1	ARG	75	1933	1794	1834	186	-91	6 5
ATOM	593	NH2	ARG	75	-3.444	21.167	41.794	1.000	13.72	
ANISOU	593	NH2	ARG	75	1510	2037	1667	-136	84	- 83
ATOM	594	C	ARG	75	-7.948	20.787	48.475	1.000	12.74	
ANISOU	594	C	ARG	75	1400	1656	1784	-209	214	-464
ATOM	595	O	ARG	75	-8.780	19.944	48.818	1.000	14.60	
ANISOU	595	O	ARG	75	1348	1926	2273	-427	156	-480
ATOM	596	N	GLY	76	-7.830	21.955	49.078	1.000	11.92	
ANISOU	596	N	GLY	76	1268	1537	1724	-22	34	-389
ATOM	597	CA	GLY	76	-8.801	22.395	50.070	1.000	12.44	
ANISOU	597	CA	GLY	76	1439	1493	1796	-315	263	-412
ATOM	598	C	GLY	76	-8.536	21.857	51.469	1.000	12.50	
ANISOU	598	C	GLY	76	1324	1527	1900	5	326	-273
ATOM	599	O	GLY	76	-7.388	21.517	51.769	1.000	14.25	
ANISOU	599	O	GLY	76	1100	2099	2218	-277	239	-225
ATOM	600	N	PHE	77	-9.574	21.840	52.287	1.000	12.65	
ANISOU	600	N	PHE	77	1191	1806	1809	-162	231	-351
ATOM	601	CA	PHE	77	-9.526	21.474	53.694	1.000	14.00	
ANISOU	601	CA	PHE	77	1295	2110	1914	-260	276	-138
ATOM	602	CB	PHE	77	-10.644	22.226	54.451	1.000	14.73	
ANISOU	602	CB	PHE	77	1554	2169	1874	-402	485	-317
ATOM	603	CG	PHE	77	-10.773	21.824	55.912	1.000	17.13	
ANISOU	603	CG	PHE	77	1927	2730	1849	-374	378	-243
ATOM	604	CD1	PHE	77	-9.949	22.369	56.886	1.000	19.49	
ANISOU	604	CD1	PHE	77	2744	2700	1962	-119	219	-789
ATOM	605	CD2	PHE	77	-11.730	20.902	56.309	1.000	19.13	
ANISOU	605	CD2	PHE	77	2348	3068	1852	-501	864	-165
ATOM	606	CE1	PHE	77	-10.068	21.973	58.217	1.000	19.75	
ANISOU	606	CE1	PHE	77	2956	2381	2168	-174	-313	-304
ATOM	607	CE2	PHE	77	-11.829	20.479	57.627	1.000	18.73	
ANISOU	607	CE2	PHE	77	2565	2711	1841	-382	310	- 77
ATOM	608	CZ	PHE	77	-10.986	21.013	58.584	1.000	19.22	
ANISOU	608	CZ	PHE	77	2378	2542	2382	98	13	-364
ATOM	609	C	PHE	77	-9.668	19.976	53.924	1.000	13.73	
ANISOU	609	C	PHE	77	1306	2096	1813	-368	21	-204
ATOM	610	O	PHE	77	-10.520	19.313	53.291	1.000	16.02	
ANISOU	610	O	PHE	77	1386	2508	2194	-470	-128	-425

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ATOM    611  N   THR  78   -8.869  19.439  54.852  1.000 14.33
ANISOU  611  N   THR  78    1543    2270    1629    -472   35   49
ATOM    612  CA  THR  78   -9.034  18.053  55.276  1.000 15.80
ANISOU  612  CA  THR  78    1813    2310    1880    -508  -23   82
ATOM    613  CB  THR  78   -8.001  17.081  54.666  1.000 18.26
ANISOU  613  CB  THR  78    1583    2199    3158    -599  334  131
ATOM    614  OG1 THR  78   -7.924  17.323  53.266  1.000 21.81
ANISOU  614  OG1 THR  78    3351    1877    3057    -88   943  -370
ATOM    615  CG2 THR  78   -8.419  15.634  54.888  1.000 20.35
ANISOU  615  CG2 THR  78    2855    2254    2622   -1119 1108 -707
ATOM    616  C   THR  78   -8.832  17.881  56.777  1.000 19.14
ANISOU  616  C   THR  78    2845    2479    1948   -1747 -471 169
ATOM    617  O   THR  78   -7.801  18.311  57.290  1.000 22.04
ANISOU  617  O   THR  78    2781    2889    2704   -1718 -985 763
ATOM    618  N   GLY  79   -9.730  17.203  57.484  1.000 19.20
ANISOU  618  N   GLY  79    2629    2823    1844   -1352  19   45
ATOM    619  CA  GLY  79   -9.429  16.695  58.819  1.000 16.69
ANISOU  619  CA  GLY  79    1800    2770    1771    -518  196   -95
ATOM    620  C   GLY  79   -8.672  15.376  58.720  1.000 22.98
ANISOU  620  C   GLY  79    2381    2874    3477    -272 -289 -545
ATOM    621  O   GLY  79   -9.227  14.504  58.044  1.000 25.57
ANISOU  621  O   GLY  79    3683    2520    3514    -456 -974 -141
ATOM    622  N   LEU  80   -7.494  15.236  59.319  1.000 22.91
ANISOU  622  N   LEU  80    2412    2900    3392    30 -206  -606
ATOM    623  CA  LEU  80   -6.644  14.081  59.072  1.000 25.08
ANISOU  623  CA  LEU  80    2848    2777    3904    206   621  361
ATOM    624  C   LEU  80   -6.372  13.294  60.370  1.000 24.30
ANISOU  624  C   LEU  80    2834    2762    3637    -300  480  200
ATOM    625  O   LEU  80   -5.729  13.812  61.291  1.000 25.14
ANISOU  625  O   LEU  80    2253    3017    4283    27 145 - 5
ATOM    626  CB  LEU  80   -5.318  14.480  58.415  1.000 27.16
ANISOU  626  CB  LEU  80    3057    3326    3937    379   918  641
ATOM    627  CG  LEU  80   -4.411  13.338  57.933  1.000 29.43
ANISOU  627  CG  LEU  80    3474    3505    4204    287  1260 173
ATOM    628  CD1 LEU  80   -5.145  12.438  56.956  1.000 38.31
ANISOU  628  CD1 LEU  80    5673    3891    4993   -1554 1987 -287
ATOM    629  CD2 LEU  80   -3.137  13.884  57.306  1.000 29.85
ANISOU  629  CD2 LEU  80    3502    3919    3920    125  1307 -264
ATOM    630  N   GLU  81   -6.853  12.055  60.396  1.000 25.58
ANISOU  630  N   GLU  81    2469    2759    4490   -196  -82  510
ATOM    631  CA  GLU  81   -6.739  11.038  61.415  1.000 25.98
ANISOU  631  CA  GLU  81    2739    2692    4441   -258  -55  424
ATOM    632  C   GLU  81   -5.299  10.536  61.562  1.000 26.28
ANISOU  632  C   GLU  81    2870    3268    3848    187  407  841
ATOM    633  O   GLU  81   -4.489  10.655  60.655  1.000 28.19
ANISOU  633  O   GLU  81    3709    3520    3483    253  799 -544
ATOM    634  CB  GLU  81   -7.685   9.861  61.123  1.000 29.83
ANISOU  634  CB  GLU  81    3533    2894    4906   -770  270  181
ATOM    635  CG  GLU  81   -7.241   8.832  60.098  1.000 25.34
ANISOU  635  CG  GLU  81    1737    2915    4976    284 -1220 158
ATOM    636  CD  GLU  81   -7.568   9.156  58.649  1.000 27.00
ANISOU  636  CD  GLU  81    1841    3405    5012    475 -1887 -456
ATOM    637  OE1 GLU  81   -8.120  10.240  58.324  1.000 28.81
ANISOU  637  OE1 GLU  81    3444    3091    4413    322 -155 791
ATOM    638  OE2 GLU  81   -7.240   8.273  57.814  1.000 31.31
ANISOU  638  OE2 GLU  81    3514    3384    4999    162  352  100
ATOM    639  N   SER  82   -4.988   9.974  62.720  1.000 31.00
ANISOU  639  N   SER  82    3568    3780    4430    -65  -30 1484
ATOM    640  CA  SER  82   -3.653   9.422  62.959  1.000 30.29
ANISOU  640  CA  SER  82    3692    3278    4540   -157 -515 1011
ATOM    641  C   SER  82   -3.421   8.150  62.150  1.000 31.76
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ANISOU	641	C	SER	82	3995	3241	4831	-102	-1104	847	
ATOM	642	O	SER	82	-4.313	7.728	61.397	1.000	34.01		
ANISOU	642	O	SER	82	3193	3794	5935	458	-1188	134	
ATOM	643	CB	SER	82	-3.463	9.167	64.452	1.000	34.74		
ANISOU	643	CB	SER	82	4687	3907	4606	-232	-979	971	
ATOM	644	OG	SER	82	-2.360	8.305	64.681	1.000	41.53		
ANISOU	644	OG	SER	82	4922	5366	5490	236	-1958	970	
ATOM	645	N	GLY	91	-17.230	9.498	70.136	1.000	42.64		
ANISOU	645	N	GLY	91	4516	7599	4086	-2166	2340	-427	
ATOM	646	CA	GLY	91	-17.485	10.892	69.789	1.000	44.91		
ANISOU	646	CA	GLY	91	6666	7702	2697	-4311	-1561	565	
ATOM	647	C	GLY	91	-16.227	11.662	69.452	1.000	38.67		
ANISOU	647	C	GLY	91	5455	7587	1652	-2821	-274	-159	
ATOM	648	O	GLY	91	-15.164	11.480	70.040	1.000	32.45		
ANISOU	648	O	GLY	91	4241	4474	3616	-183	1152	-439	
ATOM	649	N	GLY	92	-16.332	12.558	68.474	1.000	31.97		
ANISOU	649	N	GLY	92	3881	5904	2363	-1382	735	-571	
ATOM	650	CA	GLY	92	-15.232	13.412	68.075	1.000	33.02		
ANISOU	650	CA	GLY	92	4121	6150	2274	-1716	851	-956	
ATOM	651	C	GLY	92	-15.223	13.696	66.572	1.000	26.22		
ANISOU	651	C	GLY	92	2603	5046	2314	-885	741	-947	
ATOM	652	O	GLY	92	-16.289	13.666	65.939	1.000	23.91		
ANISOU	652	O	GLY	92	2490	3396	3198	-680	548	-567	
ATOM	653	N	SER	93	-14.010	13.956	66.088	1.000	23.77		
ANISOU	653	N	SER	93	2405	3917	2708	-372	736	-560	
ATOM	654	CA	SER	93	-13.801	14.287	64.690	1.000	23.41		
ANISOU	654	CA	SER	93	2700	3292	2901	-386	970	-399	
ATOM	655	C	SER	93	-12.410	13.852	64.240	1.000	24.26		
ANISOU	655	C	SER	93	2547	3908	2763	-286	833	-224	
ATOM	656	O	SER	93	-11.497	13.831	65.089	1.000	27.06		
ANISOU	656	O	SER	93	3401	3536	3346	630	92	-386	
ATOM	657	CB	SER	93	-13.966	15.795	64.467	1.000	25.71		
ANISOU	657	CB	SER	93	2811	3225	3735	-576	271	-506	
ATOM	658	OG	SER	93	-13.558	16.158	63.150	1.000	28.14		
ANISOU	658	OG	SER	93	2694	3713	4284	-373	290	517	
ATOM	659	N	TYR	94	-12.254	13.533	62.949	1.000	24.24		
ANISOU	659	N	TYR	94	2786	3320	3104	-204	791	-817	
ATOM	660	CA	TYR	94	-10.878	13.262	62.498	1.000	23.94		
ANISOU	660	CA	TYR	94	3089	2502	3505	95	1112	-683	
ATOM	661	C	TYR	94	-10.017	14.531	62.584	1.000	25.19		
ANISOU	661	C	TYR	94	2601	2657	4312	147	737	-625	
ATOM	662	O	TYR	94	-8.786	14.421	62.694	1.000	30.11		
ANISOU	662	O	TYR	94	2617	3095	5726	307	760	36	
ATOM	663	CB	TYR	94	-10.800	12.659	61.098	1.000	25.64		
ANISOU	663	CB	TYR	94	3566	2910	3267	-293	1331	-525	
ATOM	664	CG	TYR	94	-11.600	11.410	60.876	1.000	23.22		
ANISOU	664	CG	TYR	94	3359	2768	2697	-69	784	-274	
ATOM	665	CD1	TYR	94	-12.451	11.455	59.777	1.000	26.01		
ANISOU	665	CD1	TYR	94	4410	2730	2741	499	353	-543	
ATOM	666	CD2	TYR	94	-11.564	10.252	61.635	1.000	24.42		
ANISOU	666	CD2	TYR	94	3117	2866	3297	73	458	-14	
ATOM	667	CE1	TYR	94	-13.243	10.407	59.443	1.000	28.75		
ANISOU	667	CE1	TYR	94	4559	3328	3037	434	140	-1370	
ATOM	668	CE2	TYR	94	-12.375	9.159	61.305	1.000	26.47		
ANISOU	668	CE2	TYR	94	4707	2585	2764	-220	1227	-718	
ATOM	669	CZ	TYR	94	-13.209	9.247	60.212	1.000	29.70		
ANISOU	669	CZ	TYR	94	5641	3518	2125	-1172	1103	-1447	
ATOM	670	OH	TYR	94	-14.059	8.281	59.730	1.000	34.02		
ANISOU	670	OH	TYR	94	3079	3962	5886	-423	1593	-2638	
ATOM	671	N	SER	95	-10.628	15.714	62.561	1.000	22.61		
ANISOU	671	N	SER	95	2460	2497	3632	-54	59	-338	

ATOM	672	CA	SER	95	-9.924	16.975	62.750	1.000	22.54	
ANISOU	672	CA	SER	95	2257	2603	3706	-120	-301	4 6
ATOM	673	C	SER	95	-9.370	17.106	64.163	1.000	23.58	
ANISOU	673	C	SER	95	1811	3478	3671	-521	-88	-85
ATOM	674	O	SER	95	-8.623	18.034	64.481	1.000	26.53	
ANISOU	674	O	SER	95	2592	3242	4247	-469	-167	-641
ATOM	675	CB	SER	95	-10.838	18.177	62.478	1.000	27.58	
ANISOU	675	CB	SER	95	3657	2556	4264	365	-379	2 8
ATOM	676	OG	SER	95	-11.506	18.093	61.242	1.000	39.40	
ANISOU	676	OG	SER	95	6336	4214	4421	900	-1445	1442
ATOM	677	N	ASP	96	-9.712	16.194	65.060	1.000	25.04	
ANISOU	677	N	ASP	96	2579	3688	3248	-399	277	-232
ATOM	678	CA	ASP	96	-9.228	16.317	66.422	1.000	24.42	
ANISOU	678	CA	ASP	96	2603	3347	3330	-470	257	-526
ATOM	679	C	ASP	96	-7.735	16.050	66.501	1.000	24.45	
ANISOU	679	C	ASP	96	2597	3228	3466	-471	162	-383
ATOM	680	O	ASP	96	-7.073	16.589	67.404	1.000	26.51	
ANISOU	680	O	ASP	96	2656	4047	3370	-170	160	-798
ATOM	681	CB	ASP	96	-9.952	15.334	67.334	1.000	24.97	
ANISOU	681	CB	ASP	96	2310	3806	3371	-423	-228	7 7
ATOM	682	CG	ASP	96	-11.411	15.605	67.606	1.000	26.77	
ANISOU	682	CG	ASP	96	2272	4334	3566	-362	-240	716
ATOM	683	OD1	ASP	96	-11.935	16.723	67.388	1.000	33.94	
ANISOU	683	OD1	ASP	96	3267	4894	4733	647	204	569
ATOM	684	OD2	ASP	96	-12.058	14.646	68.083	1.000	32.65	
ANISOU	684	OD2	ASP	96	3624	4709	4072	-1032	1446	-202
ATOM	685	N	TYR	97	-7.254	15.226	65.581	1.000	22.21	
ANISOU	685	N	TYR	97	2292	3389	2760	-376	-77	-102
ATOM	686	CA	TYR	97	-5.835	14.852	65.583	1.000	23.71	
ANISOU	686	CA	TYR	97	2480	3542	2987	-27	106	644
ATOM	687	C	TYR	97	-5.026	15.828	64.743	1.000	23.06	
ANISOU	687	C	TYR	97	2363	3754	2647	-410	-78	350
ATOM	688	O	TYR	97	-3.992	16.327	65.230	1.000	24.29	
ANISOU	688	O	TYR	97	2205	3845	3178	-133	-230	7 4
ATOM	689	CB	TYR	97	-5.585	13.451	65.035	1.000	28.38	
ANISOU	689	CB	TYR	97	3230	3324	4229	540	-450	832
ATOM	690	CG	TYR	97	-4.132	13.025	65.082	1.000	30.37	
ANISOU	690	CG	TYR	97	3278	4101	4161	766	-191	671
ATOM	691	CD1	TYR	97	-3.511	12.691	66.285	1.000	30.19	
ANISOU	691	CD1	TYR	97	2878	4475	4119	1106	151	951
ATOM	692	CD2	TYR	97	-3.370	12.945	63.922	1.000	29.79	
ANISOU	692	CD2	TYR	97	3317	4005	3997	53	-253	544
ATOM	693	CE1	TYR	97	-2.178	12.294	66.324	1.000	32.77	
ANISOU	693	CE1	TYR	97	2554	4771	5126	574	-68	763
ATOM	694	CE2	TYR	97	-2.043	12.553	63.955	1.000	32.68	
ANISOU	694	CE2	TYR	97	3536	3793	5087	403	353	323
ATOM	695	CZ	TYR	97	-1.445	12.228	65.157	1.000	33.00	
ANISOU	695	CZ	TYR	97	2633	4284	5622	1066	264	456
ATOM	696	OH	TYR	97	-0.121	11.845	65.156	1.000	42.66	
ANISOU	696	OH	TYR	97	2572	5373	8264	1161	764	1277
ATOM	697	CB	SER	98	-3.465	16.575	62.134	1.000	23.20	
ANISOU	697	CB	SER	98	2461	2766	3587	105	2	-544
ATOM	698	OG	SER	98	-3.632	15.649	61.078	1.000	26.49	
ANISOU	698	OG	SER	98	3824	3059	3180	-154	238	-457
ATOM	699	C	SER	98	-5.694	17.744	61.701	1.000	18.66	
ANISOU	699	C	SER	98	2301	2150	2637	-295	66	1 3
ATOM	700	O	SER	98	-6.768	17.212	61.413	1.000	20.88	
ANISOU	700	O	SER	98	3042	2245	2646	-945	-249	181
ATOM	701	N	SER	98	-5.457	16.110	63.511	1.000	23.62	
ANISOU	701	N	SER	98	2816	3227	2931	-441	-395	605
ATOM	702	CA	SER	98	-4.748	17.143	62.741	1.000	21.31	

ANISOU	702	CA	SER	98	2430	2687	2982	133	153 294
ATOM	703	N	MET	99	-5.307	18.891	61.148	1.000	18.68
ANISOU	703	N	MET	99	2392	2722	1984	-978	-366 101
ATOM	704	CA	MET	99	-6.047	19.560	60.075	1.000	17.84
ANISOU	704	CA	MET	99	2431	2620	1726	-945	-212 -17
ATOM	705	CB	MET	99	-6.819	20.779	60.585	1.000	19.71
ANISOU	705	CB	MET	99	2348	2968	2173	-679	256 4
ATOM	706	CG	MET	99	-8.052	20.392	61.374	1.000	23.68
ANISOU	706	CG	MET	99	2360	3055	3582	-504	393 489
ATOM	707	SD	MET	99	-9.031	21.821	61.911	1.000	22.33
ANISOU	707	SD	MET	99	2569	3383	2534	-522	170 -120
ATOM	708	CE	MET	99	-8.148	22.225	63.419	1.000	36.98
ANISOU	708	CE	MET	99	6485	4165	3401	-225	-1904 -23
ATOM	709	C	MET	99	-5.070	19.954	58.973	1.000	17.19
ANISOU	709	C	MET	99	2269	2488	1776	-960	-194 -201
ATOM	710	O	MET	99	-3.964	20.341	59.324	1.000	16.93
ANISOU	710	O	MET	99	1932	2583	1919	-367	-208 -241
ATOM	711	N	CYS	100	-5.486	19.864	57.715	1.000	20.00
ANISOU	711	N	CYS	100	3178	2683	1739	-1753	-358 166
ATOM	712	CA	CYS	100	-4.645	20.181	56.554	1.000	16.64
ANISOU	712	CA	CYS	100	2213	2294	1817	-924	-563 468
ATOM	713	CB	CYS	100	-4.291	18.893	55.813	1.000	17.74
ANISOU	713	CB	CYS	100	2161	2174	2407	560	-765 1053
ATOM	714	SG	CYS	100	-3.035	18.928	54.552	1.000	33.56
ANISOU	714	SG	CYS	100	5244	3511	3997	414	1509 601
ATOM	715	C	CYS	100	-5.347	21.121	55.590	1.000	13.48
ANISOU	715	C	CYS	100	1879	1415	1829	-68	240 -91
ATOM	716	O	CYS	100	-6.585	21.127	55.496	1.000	14.49
ANISOU	716	O	CYS	100	1880	1952	1673	-497	-57 14
ATOM	717	N	TYR	101	-4.589	21.921	54.852	1.000	13.35
ANISOU	717	N	TYR	101	1721	1677	1673	-254	-78 49
ATOM	718	CA	TYR	101	-5.016	22.753	53.755	1.000	10.27
ANISOU	718	CA	TYR	101	926	1498	1477	-15	-141 -231
ATOM	719	CB	TYR	101	-5.102	24.265	54.124	1.000	13.60
ANISOU	719	CB	TYR	101	1626	1513	2027	-48	322 -236
ATOM	720	CG	TYR	101	-5.498	25.025	52.863	1.000	17.31
ANISOU	720	CG	TYR	101	2373	1509	2694	-158	-103 193
ATOM	721	CD1	TYR	101	-6.815	25.068	52.519	1.000	16.38
ANISOU	721	CD1	TYR	101	2464	752	3006	190	-227 55
ATOM	722	CE1	TYR	101	-7.307	25.715	51.412	1.000	17.01
ANISOU	722	CE1	TYR	101	2755	714	2993	-86	-416 122
ATOM	723	CD2	TYR	101	-4.616	25.679	52.012	1.000	19.51
ANISOU	723	CD2	TYR	101	3032	1533	2847	-1143	-594 475
ATOM	724	CE2	TYR	101	-5.065	26.321	50.872	1.000	20.96
ANISOU	724	CE2	TYR	101	2802	1949	3211	238	112 769
ATOM	725	CZ	TYR	101	-6.414	26.334	50.568	1.000	22.78
ANISOU	725	CZ	TYR	101	3238	2291	3126	-1228	-919 624
ATOM	726	OH	TYR	101	-6.875	26.986	49.442	1.000	23.10
ANISOU	726	OH	TYR	101	3141	3112	2522	-14	-129 429
ATOM	727	C	TYR	101	-4.041	22.518	52.596	1.000	11.25
ANISOU	727	C	TYR	101	1223	1398	1654	-323	103 -252
ATOM	728	O	TYR	101	-2.823	22.677	52.787	1.000	12.23
ANISOU	728	O	TYR	101	1114	1750	1784	-87	130 -20
ATOM	729	N	SER	102	-4.542	22.190	51.405	1.000	11.17
ANISOU	729	N	SER	102	1355	1279	1611	-220	145 -263
ATOM	730	CA	SER	102	-3.752	21.802	50.235	1.000	10.46
ANISOU	730	CA	SER	102	1144	1263	1568	62	-1 -125
ATOM	731	CB	SER	102	-4.027	20.343	49.908	1.000	13.46
ANISOU	731	CB	SER	102	1668	1212	2234	324	105 -301
ATOM	732	OG	SER	102	-3.723	19.487	51.025	1.000	16.42
ANISOU	732	OG	SER	102	2291	1313	2637	-122	-43 96

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ATOM    733  C    SER  102 -4.046  22.668  49.008  1.000 11.74
ANISOU  733  C    SER  102 1346    1500    1614    18 -39 -10
ATOM    734  O    SER  102 -5.148  23.148  48.784  1.000 12.84
ANISOU  734  O    SER  102 1480    1410    1988    90 -66 249
ATOM    735  N    MET  103 -3.004  22.871  48.187  1.000 12.33
ANISOU  735  N    MET  103 1554    1722    1409    -262  -10  -246
ATOM    736  CA   MET  103 -3.188  23.603  46.938  1.000 12.92
ANISOU  736  CA   MET  103 1663    1681    1565    22 47 -70
ATOM    737  CB   MET  103 -3.215  25.122  47.179  1.000 17.51
ANISOU  737  CB   MET  103 2439    1634    2579    -363  812  -44
ATOM    738  CG   MET  103 -1.929  25.808  47.549  1.000 20.07
ANISOU  738  CG   MET  103 2509    1470    3646    -538  688  376
ATOM    739  SD   MET  103 -2.136  27.614  47.689  1.000 18.10
ANISOU  739  SD   MET  103 2235    1665    2975    -3 -334  -352
ATOM    740  CE   MET  103 -2.365  28.068  45.991  1.000 18.09
ANISOU  740  CE   MET  103 2319    1457    3098    -187  -718 -214
ATOM    741  C    MET  103 -2.152  23.221  45.892  1.000 12.57
ANISOU  741  C    MET  103 1420    1837    1519    119   -53  238
ATOM    742  O    MET  103 -1.120  22.573  46.175  1.000 12.57
ANISOU  742  O    MET  103 1094    1891    1792    -155  -165 276
ATOM    743  N    GLY  104 -2.418  23.650  44.655  1.000 12.83
ANISOU  743  N    GLY  104 1493    1958    1422    237   -124 - 34
ATOM    744  CA   GLY  104 -1.533  23.459  43.513  1.000 12.65
ANISOU  744  CA   GLY  104 1075    2188    1544    -93   -37  242
ATOM    745  C    GLY  104 -1.624  24.622  42.542  1.000 14.36
ANISOU  745  C    GLY  104 1909    1985    1561    -265  -294 142
ATOM    746  O    GLY  104 -2.033  25.700  42.967  1.000 15.69
ANISOU  746  O    GLY  104 1628    2273    2060    163   -197 213
ATOM    747  N    THR  105 -1.242  24.397  41.276  1.000 14.52
ANISOU  747  N    THR  105 1829    2182    1504    -59   -375 319
ATOM    748  CA   THR  105 -1.218  25.452  40.279  1.000 15.27
ANISOU  748  CA   THR  105 1977    2223    1603    -105  -363 365
ATOM    749  CB   THR  105 -0.359  25.083  39.039  1.000 15.61
ANISOU  749  CB   THR  105 1936    2122    1873    -37   -106 554
ATOM    750  OG1  THR  105 -0.884  23.876  38.446  1.000 16.16
ANISOU  750  OG1  THR  105 1738    2260    2140    217   -285 151
ATOM    751  CG2  THR  105  1.092  24.882  39.369  1.000 17.47
ANISOU  751  CG2  THR  105 1918    2871    1847    -293  -227 527
ATOM    752  C    THR  105 -2.603  25.828  39.755  1.000 14.73
ANISOU  752  C    THR  105 1989    1694    1913    122   -340 199
ATOM    753  O    THR  105 -2.730  26.921  39.174  1.000 19.91
ANISOU  753  O    THR  105 2579    2355    2632    23 -437  1004
ATOM    754  N    ALA  106 -3.587  24.960  39.913  1.000 16.57
ANISOU  754  N    ALA  106 1836    2413    2047    2  -260  661
ATOM    755  CA   ALA  106 -4.975  25.167  39.465  1.000 14.94
ANISOU  755  CA   ALA  106 1975    1904    1798    105   -456 365
ATOM    756  CB   ALA  106 -5.054  24.945  37.965  1.000 17.75
ANISOU  756  CB   ALA  106 2006    2862    1876    140   -201 - 32
ATOM    757  C    ALA  106 -5.942  24.251  40.222  1.000 16.26
ANISOU  757  C    ALA  106 1710    2174    2293    327   -127 491
ATOM    758  O    ALA  106 -5.498  23.398  41.013  1.000 14.57
ANISOU  758  O    ALA  106 1622    1971    1945    213   -21  337
ATOM    759  N    ASP  107 -7.253  24.410  40.008  1.000 16.71
ANISOU  759  N    ASP  107 1768    2096    2485    540   -22  304
ATOM    760  CA   ASP  107 -8.310  23.638  40.633  1.000 16.10
ANISOU  760  CA   ASP  107 1696    2175    2246    51 -485  - 14
ATOM    761  CB   ASP  107 -8.231  22.171  40.211  1.000 17.09
ANISOU  761  CB   ASP  107 1299    2385    2808    144   -203 - 399
ATOM    762  CG   ASP  107 -8.418  21.966  38.720  1.000 21.54
ANISOU  762  CG   ASP  107 2385    2894    2906    84 -317  - 722
ATOM    763  OD1  ASP  107 -9.452  22.445  38.189  1.000 23.92
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ANISOU	763	OD1	ASP	107	3447	2970	2672	698	-753	-772
ATOM	764	OD2	ASP	107	-7.563	21.311	38.080	1.000	24.88	
ANISOU	764	OD2	ASP	107	2496	4004	2954	105	244	-679
ATOM	765	C	ASP	107	-8.285	23.785	42.160	1.000	14.16	
ANISOU	765	C	ASP	107	1261	1918	2201	237	-447	153
ATOM	766	O	ASP	107	-8.507	22.850	42.936	1.000	16.67	
ANISOU	766	O	ASP	107	2017	1927	2390	-189	-193	97
ATOM	767	N	ASN	108	-8.027	25.020	42.598	1.000	15.34	
ANISOU	767	N	ASN	108	2093	1866	1870	82	51	239
ATOM	768	CA	ASN	108	-7.967	25.314	44.031	1.000	13.68	
ANISOU	768	CA	ASN	108	1479	1823	1898	153	107	257
ATOM	769	CB	ASN	108	-6.925	26.420	44.272	1.000	15.60	
ANISOU	769	CB	ASN	108	1593	2026	2309	16	267	-98
ATOM	770	CG	ASN	108	-5.516	25.942	43.963	1.000	15.23	
ANISOU	770	CG	ASN	108	1505	2141	2142	5	-53	2
ATOM	771	OD1	ASN	108	-5.086	24.932	44.505	1.000	15.40	
ANISOU	771	OD1	ASN	108	1412	2442	1998	-5	-239	188
ATOM	772	ND2	ASN	108	-4.823	26.678	43.094	1.000	16.96	
ANISOU	772	ND2	ASN	108	1593	2198	2652	339	393	222
ATOM	773	C	ASN	108	-9.310	25.708	44.642	1.000	14.55	
ANISOU	773	C	ASN	108	1471	1937	2120	261	191	526
ATOM	774	O	ASN	108	-10.222	26.170	43.958	1.000	16.89	
ANISOU	774	O	ASN	108	1861	2336	2219	716	-109	14
ATOM	775	N	LEU	109	-9.412	25.512	45.954	1.000	13.42	
ANISOU	775	N	LEU	109	1458	1648	1994	179	130	9
ATOM	776	CA	LEU	109	-10.602	25.796	46.769	1.000	13.53	
ANISOU	776	CA	LEU	109	1094	2122	1923	-52	-86	-256
ATOM	777	CB	LEU	109	-11.187	24.499	47.331	1.000	14.50	
ANISOU	777	CB	LEU	109	1382	1959	2169	119	455	-468
ATOM	778	CG	LEU	109	-11.580	23.383	46.370	1.000	15.21	
ANISOU	778	CG	LEU	109	1593	1785	2403	-235	63	-342
ATOM	779	CD1	LEU	109	-11.931	22.083	47.089	1.000	18.26	
ANISOU	779	CD1	LEU	109	2460	1674	2806	382	-414	-94
ATOM	780	CD2	LEU	109	-12.780	23.783	45.529	1.000	22.36	
ANISOU	780	CD2	LEU	109	3055	2391	3052	44	-1155	288
ATOM	781	C	LEU	109	-10.203	26.794	47.840	1.000	13.54	
ANISOU	781	C	LEU	109	1179	1989	1979	76	-116	-259
ATOM	782	O	LEU	109	-9.416	26.428	48.717	1.000	16.15	
ANISOU	782	O	LEU	109	2196	2210	1730	-52	-366	32
ATOM	783	N	PHE	110	-10.706	28.025	47.786	1.000	16.11	
ANISOU	783	N	PHE	110	1369	2042	2709	105	-118	-288
ATOM	784	CA	PHE	110	-10.298	29.079	48.732	1.000	17.05	
ANISOU	784	CA	PHE	110	1626	1801	3050	-116	259	-362
ATOM	785	CB	PHE	110	-9.660	30.259	47.991	1.000	17.94	
ANISOU	785	CB	PHE	110	1423	2366	3027	-290	228	-129
ATOM	786	CG	PHE	110	-8.425	29.972	47.165	1.000	20.32	
ANISOU	786	CG	PHE	110	1702	2650	3368	-176	459	-385
ATOM	787	CD1	PHE	110	-7.257	29.598	47.793	1.000	20.35	
ANISOU	787	CD1	PHE	110	1885	2462	3387	461	573	-707
ATOM	788	CD2	PHE	110	-8.405	30.110	45.789	1.000	20.31	
ANISOU	788	CD2	PHE	110	2073	2226	3419	512	712	-264
ATOM	789	CE1	PHE	110	-6.102	29.347	47.065	1.000	19.49	
ANISOU	789	CE1	PHE	110	1958	2116	3332	176	749	-631
ATOM	790	CE2	PHE	110	-7.288	29.846	45.050	1.000	20.65	
ANISOU	790	CE2	PHE	110	2158	2094	3596	758	724	-321
ATOM	791	CZ	PHE	110	-6.118	29.496	45.694	1.000	19.43	
ANISOU	791	CZ	PHE	110	1925	2131	3327	219	542	-780
ATOM	792	C	PHE	110	-11.495	29.556	49.538	1.000	17.08	
ANISOU	792	C	PHE	110	1774	1806	2911	-74	414	-111
ATOM	793	O	PHE	110	-12.562	29.792	48.929	1.000	21.26	
ANISOU	793	O	PHE	110	1849	2577	3650	405	178	-448

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ATOM   794  N   PRO  111 -11.406 29.717  50.851 1.000 19.41
ANISOU 794  N   PRO  111 2279    2110    2985    -386  519  -314
ATOM   795  CD  PRO  111 -10.278 29.322  51.705 1.000 19.20
ANISOU 795  CD  PRO  111 2773    1880    2640    -417  255  -514
ATOM   796  CA  PRO  111 -12.549 30.252  51.604 1.000 21.47
ANISOU 796  CA  PRO  111 3026    1924    3206    -50   728  -635
ATOM   797  CB  PRO  111 -12.167 30.007  53.055 1.000 23.63
ANISOU 797  CB  PRO  111 3789    2054    3137    334   776  -575
ATOM   798  CG  PRO  111 -10.775 29.535  53.100 1.000 22.33
ANISOU 798  CG  PRO  111 2767    2908    2809    -1006 623  -414
ATOM   799  C   PRO  111 -12.828 31.739  51.433 1.000 23.88
ANISOU 799  C   PRO  111 3139    2049    3887    79 -142  -479
ATOM   800  O   PRO  111 -13.919 32.194  51.834 1.000 26.77
ANISOU 800  O   PRO  111 3800    2818    3555    992   -91  -397
ATOM   801  N   SER  112 -11.906 32.517  50.872 1.000 25.19
ANISOU 801  N   SER  112 3514    2269    3788    -247  -856 282
ATOM   802  CA  SER  112 -12.300 33.919  50.631 1.000 26.43
ANISOU 802  CA  SER  112 2654    2655    4734    496   1364 456
ATOM   803  CB  SER  112 -12.506 34.712  51.912 1.000 33.37
ANISOU 803  CB  SER  112 3122    3663    5895    172   2582 -510
ATOM   804  OG  SER  112 -11.322 34.719  52.688 1.000 36.94
ANISOU 804  OG  SER  112 6530    2154    5351    1399  206  -415
ATOM   805  C   SER  112 -11.262 34.587  49.723 1.000 26.62
ANISOU 805  C   SER  112 2613    2546    4956    1021  1668 651
ATOM   806  O   SER  112 -10.219 34.029  49.414 1.000 22.81
ANISOU 806  O   SER  112 2241    2782    3645    800   837  -400
ATOM   807  N   GLY  113 -11.570 35.802  49.279 1.000 28.93
ANISOU 807  N   GLY  113 2937    2947    5108    1008  1175 1198
ATOM   808  CA  GLY  113 -10.659 36.478  48.365 1.000 30.79
ANISOU 808  CA  GLY  113 2992    3606    5102    381   798  1400
ATOM   809  C   GLY  113 -9.362  36.829  49.070 1.000 31.83
ANISOU 809  C   GLY  113 3297    3919    4878    262   897  528
ATOM   810  O   GLY  113 -8.294  36.790  48.459 1.000 25.85
ANISOU 810  O   GLY  113 2920    2317    4585    857   450  -203
ATOM   811  N   ASP  114 -9.479  37.145  50.365 1.000 29.56
ANISOU 811  N   ASP  114 3487    2877    4868    866   1104 760
ATOM   812  CA  ASP  114 -8.257  37.463  51.122 1.000 26.15
ANISOU 812  CA  ASP  114 3189    2680    4066    1028  1584 542
ATOM   813  CB  ASP  114 -8.628  37.937  52.526 1.000 33.81
ANISOU 813  CB  ASP  114 5580    2697    4569    1774  1691 -240
ATOM   814  CG  ASP  114 -7.904  39.232  52.840 1.000 40.77
ANISOU 814  CG  ASP  114 6798    3734    4960    719   693  -248
ATOM   815  OD1 ASP  114 -8.330  40.277  52.295 1.000 48.61
ANISOU 815  OD1 ASP  114 6014    2534    9920    1703  931  -913
ATOM   816  OD2 ASP  114 -6.932  39.178  53.622 1.000 54.35
ANISOU 816  OD2 ASP  114 5258    7609    7783    -868  495  1602
ATOM   817  C   ASP  114 -7.310  36.281  51.231 1.000 23.05
ANISOU 817  C   ASP  114 2621    2102    4033    444   1874 340
ATOM   818  O   ASP  114 -6.111  36.371  50.955 1.000 22.05
ANISOU 818  O   ASP  114 2423    2277    3677    131   1411 -461
ATOM   819  N   PHE  115 -7.854  35.160  51.637 1.000 23.21
ANISOU 819  N   PHE  115 2945    1890    3984    -130  1293 -228
ATOM   820  CA  PHE  115 -7.120  33.896  51.690 1.000 19.93
ANISOU 820  CA  PHE  115 2562    1908    3102    -198  655  -294
ATOM   821  CB  PHE  115 -8.085  32.792  52.157 1.000 19.49
ANISOU 821  CB  PHE  115 2378    1754    3275    64 881  -314
ATOM   822  CG  PHE  115 -7.523  31.445  52.540 1.000 17.25
ANISOU 822  CG  PHE  115 2053    1589    2912    -56   348  -695
ATOM   823  CD1 PHE  115 -7.637  30.951  53.833 1.000 19.00
ANISOU 823  CD1 PHE  115 2728    1539    2950    73 496  -683
ATOM   824  CD2 PHE  115 -6.868  30.634  51.615 1.000 17.88
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ANISOU  824  CD2 PHE  115  1933    1931    2927    7  298 -810
ATOM    825  CE1 PHE  115 -7.100  29.711  54.163  1.000 20.25
ANISOU  825  CE1 PHE  115  2825    1825    3042    317  341 -575
ATOM    826  CE2 PHE  115 -6.338  29.412  51.955  1.000 19.11
ANISOU  826  CE2 PHE  115  1865    2158    3237    336  351 -885
ATOM    827  CZ  PHE  115 -6.452  28.936  53.233  1.000 19.39
ANISOU  827  CZ  PHE  115  2068    1910    3390    320  248 -669
ATOM    828  C   PHE  115 -6.506  33.624  50.327  1.000 17.86
ANISOU  828  C   PHE  115  1964    1945    2878    61 344 1 6
ATOM    829  O   PHE  115 -5.324  33.315  50.271  1.000 17.34
ANISOU  829  O   PHE  115  1868    2107    2613    -132 179 157
ATOM    830  N   GLU  116 -7.310  33.683  49.263  1.000 18.21
ANISOU  830  N   GLU  116  1921    1934    3065    547  281 6 2
ATOM    831  CA  GLU  116 -6.848  33.387  47.907  1.000 19.99
ANISOU  831  CA  GLU  116  2128    2618    2851    81 231 2 2 2
ATOM    832  CB  GLU  116 -7.968  33.605  46.884  1.000 18.61
ANISOU  832  CB  GLU  116  2058    1952    3060    231  244 270
ATOM    833  CG  GLU  116 -7.398  33.378  45.482  1.000 18.61
ANISOU  833  CG  GLU  116  1813    2288    2971    295  -32 -33
ATOM    834  CD  GLU  116 -8.442  33.230  44.412  1.000 22.40
ANISOU  834  CD  GLU  116  1908    3193    3410    -122 -278 -91
ATOM    835  OE1 GLU  116 -9.654  33.272  44.678  1.000 30.82
ANISOU  835  OE1 GLU  116  1793    4465    5452    273  -414 -24
ATOM    836  OE2 GLU  116 -8.085  33.063  43.225  1.000 30.24
ANISOU  836  OE2 GLU  116  3333    5132    3026    382  -658 327
ATOM    837  C   GLU  116 -5.620  34.211  47.535  1.000 18.82
ANISOU  837  C   GLU  116  2090    2069    2990    294  119  487
ATOM    838  O   GLU  116 -4.605  33.701  47.049  1.000 17.41
ANISOU  838  O   GLU  116  2228    1780    2606    45 259 282
ATOM    839  N   ARG  117 -5.660  35.508  47.777  1.000 21.02
ANISOU  839  N   ARG  117  2313    2185    3487    408  220  9 0
ATOM    840  CA  ARG  117 -4.560  36.420  47.431  1.000 21.35
ANISOU  840  CA  ARG  117  2337    1800    3976    466  147 -31
ATOM    841  C   ARG  117 -3.291  36.054  48.192  1.000 20.52
ANISOU  841  C   ARG  117  2292    2124    3380    353  288 -10
ATOM    842  O   ARG  117 -2.186  35.969  47.636  1.000 18.96
ANISOU  842  O   ARG  117  2223    1664    3316    138  318  231
ATOM    843  CB  ARG  117 -4.971  37.885  47.693  1.000 25.59
ANISOU  843  CB  ARG  117  3237    1900    4587    929  1882 632
ATOM    844  CG  ARG  117 -3.881  38.908  47.478  1.000 32.57
ANISOU  844  CG  ARG  117  5212    1925    5237    -281 1083 623
ATOM    845  CD  ARG  117 -4.325  40.323  47.859  1.000 36.56
ANISOU  845  CD  ARG  117  6009    2157    5724    149  1774 663
ATOM    846  NE  ARG  117 -5.162  40.335  49.056  1.000 44.43
ANISOU  846  NE  ARG  117  7200    3742    5940    -96  2344 -15
ATOM    847  CZ  ARG  117 -4.763  40.501  50.306  1.000 45.48
ANISOU  847  CZ  ARG  117  6422    4804    6054    -370 2388 -283
ATOM    848  NH1 ARG  117 -3.484  40.683  50.619  1.000 53.21
ANISOU  848  NH1 ARG  117  6867    6451    6900    -2543 2487 354
ATOM    849  NH2 ARG  117 -5.647  40.487  51.301  1.000 50.00
ANISOU  849  NH2 ARG  117  6265    6511    6220    224  2433 -1534
ATOM    850  N   ILE  118 -3.439  35.832  49.493  1.000 19.30
ANISOU  850  N   ILE  118  2275    1838    3221    128  407 -645
ATOM    851  CA  ILE  118 -2.275  35.527  50.331  1.000 18.25
ANISOU  851  CA  ILE  118  2376    1745    2811    78 530 -449
ATOM    852  CB  ILE  118 -2.665  35.597  51.820  1.000 18.24
ANISOU  852  CB  ILE  118  2201    1726    3003    346  906 -306
ATOM    853  CG2 ILE  118 -1.712  34.851  52.732  1.000 18.49
ANISOU  853  CG2 ILE  118  2077    2158    2792    -202 308 -530
ATOM    854  CG1 ILE  118 -2.877  37.031  52.368  1.000 24.69
ANISOU  854  CG1 ILE  118  4436    1808    3136    284  1382 -414
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ATOM   855  CD1 ILE  118 -3.786  37.025  53.582 1.000 29.63
ANISOU 855  CD1 ILE  118 6169    3096    1994    189   1258 -1068
ATOM   856  C   ILE  118 -1.692  34.172  49.959 1.000 15.65
ANISOU 856  C   ILE  118 2316    1549    2082    -89   573  -117
ATOM   857  O   ILE  118 -0.463  34.035  49.802 1.000 14.59
ANISOU 857  O   ILE  118 2240    1255    2051    16 286  214
ATOM   858  N   TRP  119 -2.523  33.139  49.784 1.000 14.44
ANISOU 858  N   TRP  119 2125    1592    1771    47 128  -71
ATOM   859  CA  TRP  119 -2.010  31.795  49.518 1.000 13.68
ANISOU 859  CA  TRP  119 1712    1529    1957    -61   220  40
ATOM   860  CB  TRP  119 -3.089  30.755  49.932 1.000 14.93
ANISOU 860  CB  TRP  119 1819    1729    2123    -234  295  -35
ATOM   861  CG  TRP  119 -2.864  30.482  51.420 1.000 16.19
ANISOU 861  CG  TRP  119 1640    2364    2146    -168  582  167
ATOM   862  CD2 TRP  119 -2.116  29.430  51.993 1.000 20.41
ANISOU 862  CD2 TRP  119 3189    2414    2151    202   523  405
ATOM   863  CE2 TRP  119 -2.177  29.580  53.392 1.000 19.84
ANISOU 863  CE2 TRP  119 3536    1818    2184    -439  234  137
ATOM   864  CE3 TRP  119 -1.390  28.357  51.456 1.000 23.94
ANISOU 864  CE3 TRP  119 5382    1647    2068    561   126  400
ATOM   865  CD1 TRP  119 -3.340  31.223  52.460 1.000 20.05
ANISOU 865  CD1 TRP  119 3207    2343    2069    -9 189  -139
ATOM   866  NE1 TRP  119 -2.938  30.689  53.649 1.000 20.32
ANISOU 866  NE1 TRP  119 2806    2726    2188    -96   -68  -185
ATOM   867  CZ2 TRP  119 -1.547  28.714  54.281 1.000 22.12
ANISOU 867  CZ2 TRP  119 4071    2256    2078    -17   105  22
ATOM   868  CZ3 TRP  119 -0.761  27.490  52.332 1.000 21.52
ANISOU 868  CZ3 TRP  119 4214    2168    1794    311   -193 197
ATOM   869  CH2 TRP  119 -0.847  27.674  53.715 1.000 24.34
ANISOU 869  CH2 TRP  119 5349    2047    1850    329   148  183
ATOM   870  C   TRP  119 -1.521  31.634  48.095 1.000 14.27
ANISOU 870  C   TRP  119 2180    1259    1985    -187  334  -65
ATOM   871  O   TRP  119 -0.569  30.865  47.855 1.000 14.73
ANISOU 871  O   TRP  119 1996    1653    1946    -67   362  101
ATOM   872  N   THR  120 -2.109  32.325  47.116 1.000 13.99
ANISOU 872  N   THR  120 2231    1237    1848    106   627  -137
ATOM   873  CA  THR  120 -1.541  32.275  45.762 1.000 15.19
ANISOU 873  CA  THR  120 1903    2093    1774    9  435  -242
ATOM   874  CB  THR  120 -2.492  32.983  44.787 1.000 16.41
ANISOU 874  CB  THR  120 1934    2304    1995    -331  152  66
ATOM   875  OG1 THR  120 -3.738  32.297  44.766 1.000 18.53
ANISOU 875  OG1 THR  120 1891    2288    2863    -236  195  407
ATOM   876  CG2 THR  120 -1.974  32.906  43.358 1.000 18.02
ANISOU 876  CG2 THR  120 2135    2602    2108    324   322  318
ATOM   877  C   THR  120 -0.145  32.870  45.727 1.000 14.19
ANISOU 877  C   THR  120 1868    2050    1475    87 285  -167
ATOM   878  O   THR  120  0.756  32.299  45.078 1.000 13.62
ANISOU 878  O   THR  120 1864    1692    1620    301   354  217
ATOM   879  N   GLN  121  0.114  33.962  46.429 1.000 14.55
ANISOU 879  N   GLN  121 1721    1672    2136    304   175  -67
ATOM   880  CA  GLN  121  1.459  34.548  46.483 1.000 15.80
ANISOU 880  CA  GLN  121 2067    1666    2271    -18  -119 362
ATOM   881  C   GLN  121  2.465  33.642  47.176 1.000 13.73
ANISOU 881  C   GLN  121 1747    1665    1806    -30   18  114
ATOM   882  O   GLN  121  3.603  33.452  46.685 1.000 15.36
ANISOU 882  O   GLN  121 2063    1688    2084    48 360  -44
ATOM   883  CB  GLN  121  1.315  35.918  47.154 1.000 18.85
ANISOU 883  CB  GLN  121 2537    1426    3200    -73  -5 356
ATOM   884  CG  GLN  121  2.639  36.558  47.543 1.000 18.88
ANISOU 884  CG  GLN  121 2507    1788    2878    59 9  -248
ATOM   885  CD  GLN  121  3.468  36.936  46.337 1.000 20.70
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ANISOU  885  CD  GLN  121 2584   2138   3142   -373  -85  231
ATOM    886  OE1 GLN  121  2.935  37.088  45.224  1.000 22.47
ANISOU  886  OE1 GLN  121 2695   2822   3019   -245    0  121
ATOM    887  NE2 GLN  121  4.779  37.101  46.522  1.000 25.22
ANISOU  887  NE2 GLN  121 2426   3344   3811    127 -131 1385
ATOM    888  N   TYR  122  2.081  33.054  48.299  1.000 12.26
ANISOU  888  N   TYR  122 1747   1514   1399    99  -55 -258
ATOM    889  CA  TYR  122  2.896  32.102  49.050  1.000 13.18
ANISOU  889  CA  TYR  122 1901   1643   1464    -20 -253 -160
ATOM    890  CB  TYR  122  2.211  31.724  50.364  1.000 13.78
ANISOU  890  CB  TYR  122 2045   1435   1756    116   48  -28
ATOM    891  CG  TYR  122  2.994  30.808  51.282  1.000 14.22
ANISOU  891  CG  TYR  122 1966   1681   1758    101   68  101
ATOM    892  CD1 TYR  122  4.271  31.120  51.722  1.000 17.48
ANISOU  892  CD1 TYR  122 1788   1972   2882    149   -5  420
ATOM    893  CE1 TYR  122  5.003  30.284  52.576  1.000 18.55
ANISOU  893  CE1 TYR  122 2131   2050   2868    102 -404  251
ATOM    894  CD2 TYR  122  2.445  29.619  51.731  1.000 20.72
ANISOU  894  CD2 TYR  122 3308   1366   3197   -519 -1524  323
ATOM    895  CE2 TYR  122  3.140  28.773  52.574  1.000 25.40
ANISOU  895  CE2 TYR  122 3772   1812   4067   -782 -2084  873
ATOM    896  CZ  TYR  122  4.413  29.101  52.992  1.000 20.93
ANISOU  896  CZ  TYR  122 2985   1742   3224    -96 -1145  313
ATOM    897  OH  TYR  122  5.068  28.230  53.826  1.000 29.87
ANISOU  897  OH  TYR  122 4830   1998   4522   -680 -3078  621
ATOM    898  C   TYR  122  3.218  30.876  48.209  1.000 12.33
ANISOU  898  C   TYR  122 1833   1412   1439    89 -218   88
ATOM    899  O   TYR  122  4.395  30.507  48.117  1.000 14.25
ANISOU  899  O   TYR  122 1896   1861   1656    339 -242  216
ATOM    900  N   PHE  123  2.224  30.269  47.573  1.000 11.28
ANISOU  900  N   PHE  123 1950   1297   1041      6 -151  185
ATOM    901  CA  PHE  123  2.482  29.151  46.665  1.000 12.08
ANISOU  901  CA  PHE  123 1731   1219   1640     64  -60   26
ATOM    902  CB  PHE  123  1.139  28.719  46.024  1.000 13.86
ANISOU  902  CB  PHE  123 2048   1550   1666   -104 -276  -82
ATOM    903  CG  PHE  123  1.311  27.516  45.099  1.000 14.44
ANISOU  903  CG  PHE  123 2173   1677   1637    142 -475  -94
ATOM    904  CD1 PHE  123  1.281  26.234  45.614  1.000 13.64
ANISOU  904  CD1 PHE  123 1857   1563   1764    -42 -702 -236
ATOM    905  CD2 PHE  123  1.511  27.664  43.729  1.000 13.81
ANISOU  905  CD2 PHE  123 1450   2164   1634   -420 -295 -248
ATOM    906  CE1 PHE  123  1.468  25.141  44.795  1.000 17.16
ANISOU  906  CE1 PHE  123 2282   1819   2418    130 -855 -644
ATOM    907  CE2 PHE  123  1.715  26.559  42.916  1.000 18.31
ANISOU  907  CE2 PHE  123 2098   2657   2201  -1053  172  -845
ATOM    908  CZ  PHE  123  1.706  25.295  43.445  1.000 16.71
ANISOU  908  CZ  PHE  123 1442   2382   2526    -36 -306 -1077
ATOM    909  C   PHE  123  3.489  29.511  45.581  1.000 13.48
ANISOU  909  C   PHE  123 2004   1472   1645    236  157   18
ATOM    910  O   PHE  123  4.424  28.768  45.242  1.000 13.07
ANISOU  910  O   PHE  123 1591   1498   1876     42  -78 -172
ATOM    911  N   ASP  124  3.294  30.684  44.948  1.000 13.83
ANISOU  911  N   ASP  124 1490   1575   2189     51  207  288
ATOM    912  CA  ASP  124  4.207  31.036  43.861  1.000 13.75
ANISOU  912  CA  ASP  124 1505   1330   2389    458  398  344
ATOM    913  CB  ASP  124  3.708  32.352  43.242  1.000 18.95
ANISOU  913  CB  ASP  124 2650   1970   2580    656  -63  926
ATOM    914  CG  ASP  124  4.470  32.708  41.989  1.000 27.54
ANISOU  914  CG  ASP  124 5327   2099   3036   -123  939  880
ATOM    915  OD1 ASP  124  4.541  31.904  41.023  1.000 37.04
ANISOU  915  OD1 ASP  124 6362   3225   4485    108 2616 -331
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ATOM	916	OD2	ASP	124	4.985	33.843	42.011	1.000	32.60	
ANISOU	916	OD2	ASP	124	4724	3509	4151	-1539	234	851
ATOM	917	C	ASP	124	5.645	31.164	44.328	1.000	14.49	
ANISOU	917	C	ASP	124	1493	1721	2293	327	485	482
ATOM	918	O	ASP	124	6.591	30.721	43.674	1.000	14.52	
ANISOU	918	O	ASP	124	1477	1363	2679	289	497	307
ATOM	919	N	ARG	125	5.866	31.777	45.499	1.000	14.03	
ANISOU	919	N	ARG	125	1501	1271	2558	353	398	414
ATOM	920	CA	ARG	125	7.214	31.863	46.044	1.000	16.40	
ANISOU	920	CA	ARG	125	1642	1625	2963	194	178	226
ATOM	921	C	ARG	125	7.828	30.494	46.346	1.000	14.69	
ANISOU	921	C	ARG	125	1396	1688	2496	232	-25	153
ATOM	922	O	ARG	125	8.999	30.245	46.034	1.000	14.10	
ANISOU	922	O	ARG	125	1279	1656	2424	7	-205	-201
ATOM	923	CB	ARG	125	7.213	32.705	47.318	1.000	18.13	
ANISOU	923	CB	ARG	125	1950	1902	3035	787	-81	46
ATOM	924	CG	ARG	125	7.045	34.193	47.041	1.000	23.51	
ANISOU	924	CG	ARG	125	2232	1780	4919	883	-36	-225
ATOM	925	CD	ARG	125	8.391	34.815	46.694	1.000	29.33	
ANISOU	925	CD	ARG	125	3596	2824	4724	-667	237	-187
ATOM	926	NE	ARG	125	8.194	36.262	46.803	1.000	32.99	
ANISOU	926	NE	ARG	125	4350	2766	5418	-678	-1642	156
ATOM	927	CZ	ARG	125	8.868	37.153	47.495	1.000	27.38	
ANISOU	927	CZ	ARG	125	2292	2758	5353	-276	-580	-246
ATOM	928	NH1	ARG	125	9.916	36.821	48.235	1.000	38.55	
ANISOU	928	NH1	ARG	125	4611	3604	6433	449	-2476	-669
ATOM	929	NH2	ARG	125	8.491	38.423	47.442	1.000	30.26	
ANISOU	929	NH2	ARG	125	4062	2570	4865	-369	-835	363
ATOM	930	N	GLN	126	7.065	29.573	46.920	1.000	12.36	
ANISOU	930	N	GLN	126	1316	1376	2002	248	-63	-264
ATOM	931	CA	GLN	126	7.524	28.201	47.153	1.000	13.39	
ANISOU	931	CA	GLN	126	1765	1323	1999	219	-355	-377
ATOM	932	CB	AGLN	126	6.363	27.455	47.828	0.500	16.24	
ANISOU	932	CB	AGLN	126	2422	1391	2357	188	202	-192
ATOM	933	CG	AGLN	126	6.149	27.758	49.284	0.500	18.83	
ANISOU	933	CG	AGLN	126	2761	2021	2371	68	233	-210
ATOM	934	CD	AGLN	126	7.077	27.146	50.298	0.500	23.94	
ANISOU	934	CD	AGLN	126	3578	2745	2774	-604	-757	3 3
ATOM	935	OE1	AGLN	126	7.181	27.683	51.419	0.500	35.94	
ANISOU	935	OE1	AGLN	126	6788	3731	3136	-578	-1567	-478
ATOM	936	NE2	AGLN	126	7.774	26.055	50.008	0.500	24.63	
ANISOU	936	NE2	AGLN	126	4491	1118	3751	-881	-2407	462
ATOM	937	CB	BGLN	126	6.525	27.417	48.018	0.500	13.36	
ANISOU	937	CB	BGLN	126	1695	1137	2245	602	-114	-255
ATOM	938	CG	BGLN	126	6.604	27.750	49.497	0.500	18.28	
ANISOU	938	CG	BGLN	126	2537	2257	2153	-68	-176	-105
ATOM	939	CD	BGLN	126	5.442	27.237	50.319	0.500	18.42	
ANISOU	939	CD	BGLN	126	2227	2573	2198	344	-159	106
ATOM	940	OE1	BGLN	126	5.605	26.442	51.242	0.500	25.36	
ANISOU	940	OE1	BGLN	126	3289	3517	2828	-100	-223	953
ATOM	941	NE2	BGLN	126	4.231	27.685	50.003	0.500	25.02	
ANISOU	941	NE2	BGLN	126	2427	2669	4413	1004	-83	-298
ATOM	942	C	GLN	126	7.860	27.448	45.861	1.000	12.95	
ANISOU	942	C	GLN	126	1506	1434	1979	307	-372	-366
ATOM	943	O	GLN	126	8.859	26.721	45.748	1.000	11.66	
ANISOU	943	O	GLN	126	1461	1142	1827	182	-85	159
ATOM	944	N	TYR	127	6.960	27.578	44.868	1.000	11.61	
ANISOU	944	N	TYR	127	1400	1276	1735	146	-168	-10
ATOM	945	CA	TYR	127	7.152	26.869	43.585	1.000	11.21	
ANISOU	945	CA	TYR	127	1469	1242	1550	-92	-40	192
ATOM	946	CB	TYR	127	5.901	26.940	42.724	1.000	11.82	

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ANISOU  946  CB  TYR  127  1346    1655    1491    -13    82  4  7
ATOM    947  CG  TYR  127  5.791   26.069  41.496  1.000 11.49
ANISOU  947  CG  TYR  127  1278    1428    1660    -4  -4  1  0
ATOM    948  CD1 TYR  127  6.550   24.928  41.270  1.000 11.28
ANISOU  948  CD1 TYR  127  1030    1334    1921    -87   -100  3  3
ATOM    949  CE1 TYR  127  6.406   24.153  40.115  1.000 11.47
ANISOU  949  CE1 TYR  127  1164    1167    2027    -51    -53  2  1
ATOM    950  CD2 TYR  127  4.871   26.410  40.500  1.000 11.98
ANISOU  950  CD2 TYR  127  1677    1093    1784    204   -219  -100
ATOM    951  CE2 TYR  127  4.715   25.655  39.357  1.000 11.37
ANISOU  951  CE2 TYR  127  1539    1118    1665    140    -68   -73
ATOM    952  CZ  TYR  127  5.494   24.508  39.163  1.000 11.02
ANISOU  952  CZ  TYR  127  1202    1226    1760    91  48  -125
ATOM    953  OH  TYR  127  5.379   23.720  38.030  1.000 11.57
ANISOU  953  OH  TYR  127  1547    1138    1712    94  177  -34
ATOM    954  C   TYR  127  8.386   27.392  42.882  1.000 10.83
ANISOU  954  C   TYR  127  1296    989  1830    230    -43  3  7  8
ATOM    955  O   TYR  127  9.185   26.605  42.375  1.000 10.86
ANISOU  955  O   TYR  127  1292    1232    1603    164    -237  -42
ATOM    956  N   THR  128  8.565   28.716  42.865  1.000 10.98
ANISOU  956  N   THR  128  1554    976  1642    212    -9  5  5  7
ATOM    957  CA  THR  128  9.766   29.305  42.295  1.000 11.80
ANISOU  957  CA  THR  128  1686    1125    1673    -47    -169  3  8  6
ATOM    958  CB  THR  128  9.605   30.849  42.378  1.000 12.66
ANISOU  958  CB  THR  128  1873    1074    1864    -52    -233  5  2  1
ATOM    959  OG1 THR  128  8.530   31.286  41.517  1.000 16.74
ANISOU  959  OG1 THR  128  2223    1597    2542    124    -457  9  9  8
ATOM    960  CG2 THR  128  10.878  31.510  41.893  1.000 16.54
ANISOU  960  CG2 THR  128  1871    778  3635    262    655  1  3  8
ATOM    961  C   THR  128  11.040  28.828  42.964  1.000 11.26
ANISOU  961  C   THR  128  1562    980  1738    -71    -162  1  4  8
ATOM    962  O   THR  128  11.995  28.458  42.258  1.000 12.16
ANISOU  962  O   THR  128  1769    1092    1758    17  26  2  7  9
ATOM    963  N   ALA  129  11.083  28.802  44.300  1.000 10.39
ANISOU  963  N   ALA  129  1183    1001    1763    70  -118  1  4  7
ATOM    964  CA  ALA  129  12.273  28.386  45.037  1.000 10.59
ANISOU  964  CA  ALA  129  1206    945  1873    -69    -170  2  8  1
ATOM    965  CB  ALA  129  12.113  28.603  46.536  1.000 12.46
ANISOU  965  CB  ALA  129  2113    851  1769    82  -218  5  7  7
ATOM    966  C   ALA  129  12.575  26.906  44.802  1.000 11.35
ANISOU  966  C   ALA  129  1258    883  2170    -16    -141  4  1  0
ATOM    967  O   ALA  129  13.738  26.485  44.641  1.000 10.93
ANISOU  967  O   ALA  129  1202    1157    1796    -36    -213  1  2  1
ATOM    968  N   SER  130  11.519  26.086  44.750  1.000 12.27
ANISOU  968  N   SER  130  1280    984  2398    -65    -1  -24
ATOM    969  CA  SER  130  11.682  24.650  44.512  1.000 10.89
ANISOU  969  CA  SER  130  1623    876  1638    -85    44  3  7  0
ATOM    970  CB  ASER 130  10.342  23.940  44.716  0.500 10.08
ANISOU  970  CB  ASER 130  1432    603  1793    213    247  4  1  3
ATOM    971  OG  ASER 130  9.771   24.063  46.006  0.500  9.12
ANISOU  971  OG  ASER 130  1021    651  1792    91  1  -143
ATOM    972  CB  BSER 130  10.364  23.919  44.765  0.500 10.60
ANISOU  972  CB  BSER 130  1687    822  1521    -45    318  1  5  8
ATOM    973  OG  BSER 130  9.418   24.098  43.734  0.500 16.22
ANISOU  973  OG  BSER 130  1717    1289    3156    137    -525  3  4  8
ATOM    974  C   SER  130  12.214  24.373  43.110  1.000 10.53
ANISOU  974  C   SER  130  1586    733  1684    -166    210  4  8  4
ATOM    975  O   SER  130  13.137  23.532  42.942  1.000 11.17
ANISOU  975  O   SER  130  1385    1012    1849    -151   -95  1  4  0
ATOM    976  N   ARG  131  11.680  25.044  42.079  1.000 10.46
ANISOU  976  N   ARG  131  1578    861  1534    -87    -66  9  9
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ATOM   977  CA  ARG  131  12.260  24.839  40.742  1.000 10.60
ANISOU 977  CA  ARG  131  1480    1110    1438    61 -288  8 2
ATOM   978  CB  ARG  131  11.426  25.553  39.679  1.000 12.99
ANISOU 978  CB  ARG  131  1893    1369    1673    63 -525  2 7 6
ATOM   979  CG  ARG  131  10.003  25.065  39.431  1.000 13.64
ANISOU 979  CG  ARG  131  1707    1735    1742    335   -559 - 8 6
ATOM   980  CD  ARG  131  9.349   25.669  38.206  1.000 17.71
ANISOU 980  CD  ARG  131  2078    1973    2677    81 -983  7 0 1
ATOM   981  NE  ARG  131  9.453   27.113  38.015  1.000 19.76
ANISOU 981  NE  ARG  131  2716    2034    2757    -25   -525 7 1 3
ATOM   982  CZ  ARG  131  8.629   28.004  38.568  1.000 21.24
ANISOU 982  CZ  ARG  131  3688    1878    2503    -8 -128  6 4 7
ATOM   983  NH1 ARG  131  7.631   27.634  39.366  1.000 21.32
ANISOU 983  NH1 ARG  131  2792    3142    2166    -486  -667 5  7
ATOM   984  NH2 ARG  131  8.771   29.310  38.361  1.000 27.83
ANISOU 984  NH2 ARG  131  4649    1822    4103    -90   -422 5 6 1
ATOM   985  C   ARG  131  13.714  25.323  40.688  1.000 10.42
ANISOU 985  C   ARG  131  1542    1078    1339    50 -103  1
ATOM   986  O   ARG  131  14.568  24.683  40.080  1.000 10.94
ANISOU 986  O   ARG  131  1544    1105    1506    177   -134 4  2
ATOM   987  N   ALA  132  14.028  26.438  41.343  1.000 10.97
ANISOU 987  N   ALA  132  1477    1129    1563    74 -364  - 4 5
ATOM   988  CA  ALA  132  15.379  26.983  41.343  1.000 11.10
ANISOU 988  CA  ALA  132  1539    944  1735    9   -102  9  7
ATOM   989  CB  ALA  132  15.429  28.344  42.048  1.000 12.82
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ATOM   990  C   ALA  132  16.393  26.045  41.995  1.000 11.55
ANISOU 990  C   ALA  132  1085    1107    2197    -197  305  7 4 5
ATOM   991  O   ALA  132  17.481  25.832  41.432  1.000 11.81
ANISOU 991  O   ALA  132  1081    1809    1599    -204  17 - 9
ATOM   992  N   VAL  133  16.061  25.490  43.175  1.000 11.16
ANISOU 992  N   VAL  133  1260    1356    1623    -148  51 3 5 0
ATOM   993  CA  VAL  133  17.011  24.587  43.840  1.000 11.62
ANISOU 993  CA  VAL  133  1505    1529    1380    -69   -297 8  9
ATOM   994  CB  VAL  133  16.738  24.418  45.344  1.000 12.14
ANISOU 994  CB  VAL  133  1376    1674    1564    -74   -25  3 6 4
ATOM   995  CG1 VAL  133  15.550  23.501  45.608  1.000 14.96
ANISOU 995  CG1 VAL  133  1705    2316    1662    -706  8  - 3 5 7
ATOM   996  CG2 VAL  133  17.981  23.864  46.033  1.000 15.63
ANISOU 996  CG2 VAL  133  1755    2340    1845    -341  -677 5 5 1
ATOM   997  C   VAL  133  17.079  23.268  43.065  1.000 11.71
ANISOU 997  C   VAL  133  1376    1363    1711    -24   -425 1 6 9
ATOM   998  O   VAL  133  18.198  22.733  42.925  1.000 11.55
ANISOU 998  O   VAL  133  1391    1453    1545    -4 -116  3 9 8
ATOM   999  N   ALA  134  15.982  22.758  42.480  1.000 12.87
ANISOU 999  N   ALA  134  1399    1517    1973    28 -334  - 2 2 8
ATOM   1000 CA  ALA  134  16.084  21.557  41.621  1.000 10.57
ANISOU 1000 CA  ALA  134  1106    1220    1691    153   -298 9  6
ATOM   1001 CB  ALA  134  14.699  21.096  41.186  1.000 12.20
ANISOU 1001 CB  ALA  134  1254    1589    1794    35 -303  - 1 2 7
ATOM   1002 C   ALA  134  16.968  21.797  40.399  1.000 12.58
ANISOU 1002 C   ALA  134  1393    1399    1987    272   -4 2 7 7
ATOM   1003 O   ALA  134  17.712  20.924  39.970  1.000 11.01
ANISOU 1003 O   ALA  134  1254    1358    1574    83 -268  2  6
ATOM   1004 N   ARG  135  16.908  22.995  39.809  1.000 12.03
ANISOU 1004 N   ARG  135  1517    1230    1824    -62   -327 8  7
ATOM   1005 CA  ARG  135  17.773  23.353  38.676  1.000 13.23
ANISOU 1005 CA  ARG  135  1854    1158    2015    -270  -209 1 6 1
ATOM   1006 CB  ARG  135  17.393  24.734  38.170  1.000 14.57
ANISOU 1006 CB  ARG  135  2203    1339    1994    -45   -541 2 2 2
ATOM   1007 CG  ARG  135  17.753  25.160  36.797  1.000 19.22
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ANISOU 1007  CG  ARG  135 4204    1120    1980    -490  -433 1 5 0
ATOM   1008  CD  ARG  135 17.237  26.563  36.471  1.000 22.14
ANISOU 1008  CD  ARG  135 4046    1500    2868    -159  315  8 2 2
ATOM   1009  NE  ARG  135 15.831  26.607  36.077  1.000 22.66
ANISOU 1009  NE  ARG  135 4239    1404    2965    -94   47 2 5 7
ATOM   1010  CZ  ARG  135 14.802  27.184  36.684  1.000 21.69
ANISOU 1010  CZ  ARG  135 4004    1906    2333    92 -506  6 4
ATOM   1011  NH1 ARG  135 14.917  27.843  37.833  1.000 22.26
ANISOU 1011  NH1 ARG  135 4114    2532    1812    460   -833 3 4 1
ATOM   1012  NH2 ARG  135 13.582  27.113  36.149  1.000 22.31
ANISOU 1012  NH2 ARG  135 4000    2243    2234    -544  -419 8
ATOM   1013  C   ARG  135 19.251  23.275  39.057  1.000 12.70
ANISOU 1013  C   ARG  135 1742    1264    1821    -119  -16  4 3 0
ATOM   1014  O   ARG  135 20.069  22.818  38.238  1.000 14.67
ANISOU 1014  O   ARG  135 2133    1529    1910    19 169 3 9 1
ATOM   1015  N   GLU  136 19.572  23.712  40.266  1.000 12.15
ANISOU 1015  N   GLU  136 1423    1372    1820    -36   70 4 3 0
ATOM   1016  CA  GLU  136 20.960  23.630  40.763  1.000 14.52
ANISOU 1016  CA  GLU  136 1622    1701    2194    -90   -197 3 7 1
ATOM   1017  CB  GLU  136 21.212  24.513  41.981  1.000 15.59
ANISOU 1017  CB  GLU  136 1502    1781    2642    14 -231  1 1
ATOM   1018  CG  GLU  136 21.064  26.020  41.783  1.000 18.01
ANISOU 1018  CG  GLU  136 2010    1762    3071    -232  -153 1 2 6
ATOM   1019  CD  GLU  136 21.798  26.484  40.537  1.000 20.18
ANISOU 1019  CD  GLU  136 2071    2079    3519    -308  89 3 6 9
ATOM   1020  OE1 GLU  136 22.987  26.148  40.394  1.000 24.64
ANISOU 1020  OE1 GLU  136 2060    2937    4364    -262  338  6 1 5
ATOM   1021  OE2 GLU  136 21.195  27.150  39.670  1.000 24.19
ANISOU 1021  OE2 GLU  136 2479    2327    4385    -381  317  1 4 2 6
ATOM   1022  C   GLU  136 21.364  22.186  41.076  1.000 14.00
ANISOU 1022  C   GLU  136 1338    1619    2361    -112  -442 2 2 3
ATOM   1023  O   GLU  136 22.508  21.781  40.833  1.000 13.86
ANISOU 1023  O   GLU  136 1366    1890    2009    -100  -287 3 2 9
ATOM   1024  N   VAL  137 20.472  21.338  41.580  1.000 11.78
ANISOU 1024  N   VAL  137 1309    1451    1715    148   -223 8  5
ATOM   1025  CA  VAL  137 20.753  19.896  41.771  1.000 12.49
ANISOU 1025  CA  VAL  137 1369    1522    1853    240   -69  2 8 9
ATOM   1026  CB  VAL  137 19.560  19.165  42.429  1.000 12.41
ANISOU 1026  CB  VAL  137 1422    1424    1869    -67   -85  -2 0 4
ATOM   1027  CG1 VAL  137 19.728  17.634  42.401  1.000 12.55
ANISOU 1027  CG1 VAL  137 1371    1508    1892    182   185  1 1 1
ATOM   1028  CG2 VAL  137 19.355  19.607  43.852  1.000 11.35
ANISOU 1028  CG2 VAL  137 1461    1281    1572    182   -254 2 8 8
ATOM   1029  C   VAL  137 21.100  19.241  40.435  1.000 12.48
ANISOU 1029  C   VAL  137 1202    1428    2113    150   -16  8 5
ATOM   1030  O   VAL  137 22.057  18.462  40.287  1.000 13.03
ANISOU 1030  O   VAL  137 1021    1683    2249    149   1  1 4 6
ATOM   1031  N   LEU  138 20.309  19.562  39.401  1.000 10.28
ANISOU 1031  N   LEU  138 1198    881  1829    -15   158 2 2 6
ATOM   1032  CA  LEU  138 20.571  19.029  38.066  1.000 12.48
ANISOU 1032  CA  LEU  138 1312    1408    2024    110   273  - 5 2
ATOM   1033  CB  LEU  138 19.398  19.358  37.130  1.000 11.81
ANISOU 1033  CB  LEU  138 1260    1586    1642    -20   383  4  3
ATOM   1034  CG  LEU  138 18.036  18.726  37.457  1.000 10.77
ANISOU 1034  CG  LEU  138 1391    1397    1304    -83   219  2 1 3
ATOM   1035  CD1 LEU  138 16.916  19.324  36.596  1.000 12.72
ANISOU 1035  CD1 LEU  138 1416    1587    1829    -59   -25  1 7 3
ATOM   1036  CD2 LEU  138 18.052  17.207  37.320  1.000 14.32
ANISOU 1036  CD2 LEU  138 1986    1390    2065    -79   296  3 7 0
ATOM   1037  C   LEU  138 21.903  19.525  37.505  1.000 13.61
ANISOU 1037  C   LEU  138 1305    2026    1840    -65   174  5
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ATOM   1038  O   LEU  138  22.695  18.760  36.920  1.000 14.97
ANISOU 1038  O   LEU  138  1125    2247    2313     105   234  178
ATOM   1039  N   ARG  139  22.184  20.816  37.614  1.000 13.26
ANISOU 1039  N   ARG  139  1432    2046    1561    -155   219  317
ATOM   1040  CA  ARG  139  23.397  21.372  37.085  1.000 14.71
ANISOU 1040  CA  ARG  139  1648    1941    2000     -27   502  447
ATOM   1041  C   ARG  139  24.636  20.815  37.775  1.000 15.16
ANISOU 1041  C   ARG  139  1425    2101    2235    -158   324  116
ATOM   1042  O   ARG  139  25.650  20.495  37.166  1.000 18.15
ANISOU 1042  O   ARG  139  1628    2581    2688      18   612  339
ATOM   1043  CB  ARG  139  23.394  22.926  37.206  1.000 19.67
ANISOU 1043  CB  ARG  139  1749    1923    3803    -196   186  252
ATOM   1044  CG  ARG  139  24.418  23.487  36.237  1.000 28.66
ANISOU 1044  CG  ARG  139  3924    2584    4383   -2305   882 -563
ATOM   1045  CD  ARG  139  24.245  24.997  36.111  1.000 39.58
ANISOU 1045  CD  ARG  139  6801    2389    5849   -3273   119 -306
ATOM   1046  NE  ARG  139  24.910  25.660  37.210  1.000 47.91
ANISOU 1046  NE  ARG  139  9548    2435    6222   -2157 -1331 -708
ATOM   1047  CZ  ARG  139  24.493  26.682  37.928  1.000 45.42
ANISOU 1047  CZ  ARG  139  6941    4516    5802    -882  -2118 -1238
ATOM   1048  NH1 ARG  139  23.316  27.273  37.722  1.000 64.33
ANISOU 1048  NH1 ARG  139  7248    8153    9039      93 -2965 -980
ATOM   1049  NH2 ARG  139  25.309  27.109  38.888  1.000 32.62
ANISOU 1049  NH2 ARG  139  5020    4758    2616   -2746   590  167
ATOM   1050  N   ALA  140  24.562  20.684  39.096  1.000 14.85
ANISOU 1050  N   ALA  140  1287    2204    2151    -517   -26  -46
ATOM   1051  CA  ALA  140  25.730  20.257  39.856  1.000 15.80
ANISOU 1051  CA  ALA  140  989 2649     2366    -309   -9 -401
ATOM   1052  CB  ALA  140  25.444  20.442  41.330  1.000 19.36
ANISOU 1052  CB  ALA  140  2685    2447    2222     243   -435 -480
ATOM   1053  C   ALA  140  26.111  18.806  39.584  1.000 16.86
ANISOU 1053  C   ALA  140  1555    2795    2054      12  -186  -458
ATOM   1054  O   ALA  140  27.258  18.403  39.796  1.000 18.90
ANISOU 1054  O   ALA  140  1538    2686    2958     -21    60  145
ATOM   1055  N   THR  141  25.147  18.025  39.098  1.000 17.53
ANISOU 1055  N   THR  141  1779    2532    2350    -528   218  -108
ATOM   1056  CA  THR  141  25.340  16.625  38.765  1.000 15.59
ANISOU 1056  CA  THR  141  1256    2401    2268    -192   -95  291
ATOM   1057  CB  THR  141  24.207  15.735  39.343  1.000 14.77
ANISOU 1057  CB  THR  141  1238    2200    2172     155   282  301
ATOM   1058  OG1 THR  141  22.946  16.168  38.849  1.000 12.47
ANISOU 1058  OG1 THR  141  1249    1565    1926     -31   295  476
ATOM   1059  CG2 THR  141  24.167  15.818  40.859  1.000 14.82
ANISOU 1059  CG2 THR  141  1394    2077    2160     135   -47  177
ATOM   1060  C   THR  141  25.423  16.374  37.257  1.000 16.11
ANISOU 1060  C   THR  141  1732    2046    2343     303   583  325
ATOM   1061  O   THR  141  25.432  15.235  36.778  1.000 17.55
ANISOU 1061  O   THR  141  1991    2104    2573     237   555  249
ATOM   1062  N   GLY  142  25.474  17.416  36.446  1.000 17.74
ANISOU 1062  N   GLY  142  2127    2197    2416     303   260  501
ATOM   1063  CA  GLY  142  25.611  17.263  34.987  1.000 17.32
ANISOU 1063  CA  GLY  142  1642    2494    2447    -160   453  517
ATOM   1064  C   GLY  142  24.426  16.556  34.358  1.000 16.37
ANISOU 1064  C   GLY  142  1619    1893    2710     261   472  42
ATOM   1065  O   GLY  142  24.654  15.824  33.379  1.000 18.43
ANISOU 1065  O   GLY  142  2243    2558    2201      57 798  163
ATOM   1066  N   THR  143  23.232  16.738  34.907  1.000 13.99
ANISOU 1066  N   THR  143  1531    1429    2356      83 430  350
ATOM   1067  CA  THR  143  22.049  16.003  34.472  1.000 14.69
ANISOU 1067  CA  THR  143  1768    1591    2223      8  342  93
ATOM   1068  CB  THR  143  21.208  15.584  35.700  1.000 15.52
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ANISOU 1068  CB  THR  143 1457    1653    2785    55 419 5 2 9
ATOM   1069  OG1 THR  143 22.037  14.784  36.573  1.000 14.63
ANISOU 1069  OG1 THR  143 1296    1792    2471    52 434 3 6 9
ATOM   1070  CG2 THR  143 20.044  14.738  35.231  1.000 14.24
ANISOU 1070  CG2 THR  143 1761    1981    1669    3  379 1 9 2
ATOM   1071  C   THR  143 21.135  16.785  33.532  1.000 13.96
ANISOU 1071  C   THR  143 1553    1708    2044    128  479  -1 3 1
ATOM   1072  O   THR  143 20.642  17.828  33.923  1.000 15.65
ANISOU 1072  O   THR  143 2374    1580    1995    315  486  5 5
ATOM   1073  N   GLU  144 20.928  16.279  32.322  1.000 15.32
ANISOU 1073  N   GLU  144 1734    1904    2184    -156 260  -2 7 1
ATOM   1074  CA  GLU  144 19.917  16.693  31.362  1.000 17.30
ANISOU 1074  CA  GLU  144 1686    2470    2417    -377 152  1 0 6
ATOM   1075  C   GLU  144 18.774  15.693  31.292  1.000 16.84
ANISOU 1075  C   GLU  144 1633    2380    2386    -298 313  -2 4 2
ATOM   1076  O   GLU  144 18.922  14.631  30.680  1.000 16.71
ANISOU 1076  O   GLU  144 1470    2057    2821    -43  610  5 8
ATOM   1077  CB  GLU  144 20.539  16.856  29.970  1.000 21.91
ANISOU 1077  CB  GLU  144 2747    3417    2162    -1508 31 - 8
ATOM   1078  CG  GLU  144 19.568  17.063  28.825  1.000 37.93
ANISOU 1078  CG  GLU  144 6652    4374    3385    -2057 -2082 1 7 6 7
ATOM   1079  CD  GLU  144 19.293  18.507  28.466  1.000 43.55
ANISOU 1079  CD  GLU  144 7869    4258    4419    -2497 -2259 2 1 2 9
ATOM   1080  OE1 GLU  144 19.602  19.365  29.326  1.000 51.81
ANISOU 1080  OE1 GLU  144 9843    4613    5230    -3180 -832 1 1 2 6
ATOM   1081  OE2 GLU  144 18.766  18.798  27.367  1.000 40.12
ANISOU 1081  OE2 GLU  144 5551    6029    3662    -285  -115 2 6 6 0
ATOM   1082  N   PRO  145 17.620  15.959  31.908  1.000 14.29
ANISOU 1082  N   PRO  145 1634    1364    2432    -4 208 2 6 5
ATOM   1083  CD  PRO  145 17.256  17.136  32.718  1.000 14.14
ANISOU 1083  CD  PRO  145 1735    1778    1859    -55  32 1 6 7
ATOM   1084  CA  PRO  145 16.507  15.000  31.807  1.000 13.72
ANISOU 1084  CA  PRO  145 1484    1391    2337    66 173 4 6 6
ATOM   1085  CB  PRO  145 15.406  15.701  32.606  1.000 14.20
ANISOU 1085  CB  PRO  145 1459    1636    2302    161  -41  2 8 9
ATOM   1086  CG  PRO  145 16.132  16.608  33.561  1.000 14.43
ANISOU 1086  CG  PRO  145 1796    2007    1679    -23  -42  4 4 9
ATOM   1087  C   PRO  145 16.076  14.794  30.372  1.000 15.18
ANISOU 1087  C   PRO  145 1745    1665    2359    -192 231  2 8 7
ATOM   1088  O   PRO  145 16.178  15.685  29.509  1.000 15.40
ANISOU 1088  O   PRO  145 2430    1511    1910    -85  613  - 1 5
ATOM   1089  N   ASP  146 15.544  13.613  30.070  1.000 15.79
ANISOU 1089  N   ASP  146 2019    1611    2367    -191 666  8 1
ATOM   1090  CA  ASP  146 14.918  13.366  28.773  1.000 16.74
ANISOU 1090  CA  ASP  146 2095    1759    2506    -348 575  - 7 7
ATOM   1091  CB  ASP  146 14.300  11.966  28.727  1.000 18.99
ANISOU 1091  CB  ASP  146 2508    1729    2977    -323 780  - 4 3 9
ATOM   1092  CG  ASP  146 13.504  11.784  27.444  1.000 27.04
ANISOU 1092  CG  ASP  146 4012    2450    3813    -720 -229 - 8 0 5
ATOM   1093  OD1 ASP  146 12.295  12.121  27.409  1.000 38.65
ANISOU 1093  OD1 ASP  146 3943    4889    5852    -595 -1282 - 3 2 3
ATOM   1094  OD2 ASP  146 14.091  11.311  26.466  1.000 39.95
ANISOU 1094  OD2 ASP  146 6913    5052    3214    16 0  -1 1 8 2
ATOM   1095  C   ASP  146 13.860  14.441  28.552  1.000 16.65
ANISOU 1095  C   ASP  146 2461    1904    1961    -128 580  - 4 0
ATOM   1096  O   ASP  146 13.041  14.605  29.457  1.000 15.67
ANISOU 1096  O   ASP  146 2110    1935    1908    -334 381  - 4 2 0
ATOM   1097  N   GLY  147 13.871  15.149  27.429  1.000 20.60
ANISOU 1097  N   GLY  147 3484    2416    1927    -26  419  1 2 9
ATOM   1098  CA  GLY  147 12.903  16.212  27.155  1.000 18.06
ANISOU 1098  CA  GLY  147 2771    2451    1638    -382 98 9 3
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ATOM   1099  C   GLY  147  13.361  17.574  27.609  1.000 18.73
ANISOU 1099  C   GLY  147   2836    2195    2085    -524  143  527
ATOM   1100  O   GLY  147  12.676  18.570  27.282  1.000 18.34
ANISOU 1100  O   GLY  147   2865    2416    1687    -413  -72  389
ATOM   1101  N   GLY  148  14.498  17.634  28.316  1.000 16.35
ANISOU 1101  N   GLY  148   2936    1506    1772    -157  142   8  8
ATOM   1102  CA  GLY  148  15.116  18.889  28.747  1.000 15.34
ANISOU 1102  CA  GLY  148   2723    1279    1829    55 450 - 2 6
ATOM   1103  C   GLY  148  14.768  19.339  30.144  1.000 12.97
ANISOU 1103  C   GLY  148   2231    1416    1280    -93   -62  407
ATOM   1104  O   GLY  148  13.769  18.930  30.771  1.000 13.79
ANISOU 1104  O   GLY  148   2301    1376    1561    -164  88 323
ATOM   1105  N   VAL  149  15.604  20.224  30.718  1.000 12.81
ANISOU 1105  N   VAL  149   1815    1366    1686    155   -31  238
ATOM   1106  CA  VAL  149  15.388  20.724  32.079  1.000 11.81
ANISOU 1106  CA  VAL  149   1333    1390    1765    54 -92 129
ATOM   1107  CB  VAL  149  16.594  21.636  32.480  1.000 11.97
ANISOU 1107  CB  VAL  149   1136    1696    1717   -100  246  124
ATOM   1108  CG1 VAL  149  16.358  22.336  33.802  1.000 15.26
ANISOU 1108  CG1 VAL  149   1941    1922    1936   -195  55 -223
ATOM   1109  CG2 VAL  149  17.868  20.794  32.538  1.000 17.21
ANISOU 1109  CG2 VAL  149   1231    2045    3265    45 102 -103
ATOM   1110  C   VAL  149  14.101  21.482  32.280  1.000 11.32
ANISOU 1110  C   VAL  149   1186    1303    1813    -78   131  479
ATOM   1111  O   VAL  149  13.378  21.218  33.253  1.000 12.35
ANISOU 1111  O   VAL  149   1664    1423    1608    -71  229  167
ATOM   1112  N   GLU  150  13.752  22.463  31.460  1.000 11.96
ANISOU 1112  N   GLU  150   1347    1453    1746    29 -36 420
ATOM   1113  CA  GLU  150  12.592  23.286  31.815  1.000 10.90
ANISOU 1113  CA  GLU  150   1623    1359    1159    118   0  405
ATOM   1114  CB  GLU  150  12.608  24.601  30.999  1.000 17.60
ANISOU 1114  CB  GLU  150   2530    1470    2687    181  -161 907
ATOM   1115  CG  GLU  150  13.811  25.488  31.314  1.000 17.86
ANISOU 1115  CG  GLU  150   2744    797  3246   246   434 202
ATOM   1116  CD  GLU  150  13.956  25.929  32.738  1.000 19.47
ANISOU 1116  CD  GLU  150   3018    1353   3027    -97   -84  662
ATOM   1117  OE1 GLU  150  12.951  26.005  33.475  1.000 18.21
ANISOU 1117  OE1 GLU  150   3035    1512    2373   -178  -321 536
ATOM   1118  OE2 GLU  150  15.109  26.237  33.122  1.000 22.59
ANISOU 1118  OE2 GLU  150   2993    1664    3927    -38  -150 284
ATOM   1119  C   GLU  150  11.277  22.533  31.705  1.000 12.22
ANISOU 1119  C   GLU  150   1429    1540    1676    235   147  - 5
ATOM   1120  O   GLU  150  10.341  22.757  32.530  1.000 13.44
ANISOU 1120  O   GLU  150   1739    1474    1894    315   470  288
ATOM   1121  N   ALA  151  11.118  21.625  30.742  1.000 11.88
ANISOU 1121  N   ALA  151   1783    1255    1477    94 45 253
ATOM   1122  CA  ALA  151   9.881  20.844  30.698  1.000 13.82
ANISOU 1122  CA  ALA  151   1744    2054    1454   -100  -413 396
ATOM   1123  CB  ALA  151   9.739  20.094  29.390  1.000 14.89
ANISOU 1123  CB  ALA  151   1489    2318    1851    22 -269  - 35
ATOM   1124  C   ALA  151   9.792  19.864  31.867  1.000 12.71
ANISOU 1124  C   ALA  151   1448    1463    1920    93 41 424
ATOM   1125  O   ALA  151   8.655  19.580  32.280  1.000 14.69
ANISOU 1125  O   ALA  151   1535    2114    1932   -242  204  -108
ATOM   1126  N   PHE  152  10.925  19.401  32.410  1.000 11.73
ANISOU 1126  N   PHE  152   1598    1259    1598    120   9  271
ATOM   1127  CA  PHE  152  10.890  18.554  33.602  1.000 10.61
ANISOU 1127  CA  PHE  152   1444    1061    1526    -33   34 160
ATOM   1128  CB  PHE  152  12.293  17.981  33.820  1.000 10.23
ANISOU 1128  CB  PHE  152   1317    1132    1437   -144  207  410
ATOM   1129  CG  PHE  152  12.517  17.187  35.095  1.000 10.36
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ANISOU 1129  CG  PHE 152 1388   1149   1399    -34   147  2 7 6
ATOM   1130  CD1 PHE 152 12.036 15.896 35.229 1.000 11.24
ANISOU 1130  CD1 PHE 152 1479   1047   1743    114  -103 5 6 6
ATOM   1131  CD2 PHE 152 13.229 17.701 36.154 1.000 11.21
ANISOU 1131  CD2 PHE 152 1489   1449   1319    85 174 1 5 1
ATOM   1132  CE1 PHE 152 12.252 15.163 36.380 1.000 10.80
ANISOU 1132  CE1 PHE 152 1400   1234   1467    249  -111 3 7 3
ATOM   1133  CE2 PHE 152 13.431 16.992 37.341 1.000 11.82
ANISOU 1133  CE2 PHE 152 1709   1622   1160   -276  414  2 5 0
ATOM   1134  CZ  PHE 152 12.932 15.717 37.457 1.000 11.97
ANISOU 1134  CZ  PHE 152 1651   1604   1293   -255  296  1 7 0
ATOM   1135  C   PHE 152 10.430 19.292 34.858 1.000 12.24
ANISOU 1135  C   PHE 152 1754   1168   1730    -10   339  8 4
ATOM   1136  O   PHE 152 9.728  18.729 35.726 1.000 11.49
ANISOU 1136  O   PHE 152 1672   1142   1550    200   109  2 7 7
ATOM   1137  N   LEU 153 10.809 20.575 34.997 1.000 11.86
ANISOU 1137  N   LEU 153 2030   1236   1240    -6 73 1 5 6
ATOM   1138  CA  LEU 153 10.532 21.386 36.155 1.000 11.99
ANISOU 1138  CA  LEU 153 1890   1229   1437   -165  307  8 5
ATOM   1139  CB  LEU 153 11.654 22.420 36.353 1.000 12.81
ANISOU 1139  CB  LEU 153 1691   1381   1794    -72   97 - 4 0
ATOM   1140  CG  LEU 153 13.059 21.910 36.592 1.000 12.87
ANISOU 1140  CG  LEU 153 1762   1645   1483    146   269  6 4
ATOM   1141  CD1 LEU 153 14.027 23.081 36.611 1.000 15.99
ANISOU 1141  CD1 LEU 153 1609   2006   2462    -49   450  - 4 3 1
ATOM   1142  CD2 LEU 153 13.185 21.158 37.914 1.000 19.37
ANISOU 1142  CD2 LEU 153 3091   2462   1806    809   275  5 4 0
ATOM   1143  C   LEU 153 9.179  22.084 36.123 1.000 12.96
ANISOU 1143  C   LEU 153 1728   1253   1943   -336  360  - 4 3
ATOM   1144  O   LEU 153 8.709  22.506 37.193 1.000 13.24
ANISOU 1144  O   LEU 153 1617   1302   2109   -443  481  - 1 8 2
ATOM   1145  N   ASP 154 8.568  22.203 34.955 1.000 13.29
ANISOU 1145  N   ASP 154 1643   1457   1951    60 517 2 8 0
ATOM   1146  CA  ASP 154 7.195  22.671 34.764 1.000 14.21
ANISOU 1146  CA  ASP 154 1862   1255   2280    313   631  6 8 3
ATOM   1147  CB  ASP 154 6.995  23.269 33.373 1.000 18.38
ANISOU 1147  CB  ASP 154 2091   2156   2738    328   728  1 4 7 5
ATOM   1148  CG  ASP 154 5.534  23.367 32.929 1.000 22.95
ANISOU 1148  CG  ASP 154 2323   3543   2855    676   430  1 5 0 1
ATOM   1149  OD1 ASP 154 4.685  23.607 33.820 1.000 20.85
ANISOU 1149  OD1 ASP 154 2164   2368   3389    895   478  1 1 4 4
ATOM   1150  OD2 ASP 154 5.168  23.254 31.702 1.000 24.33
ANISOU 1150  OD2 ASP 154 2989   3146   3110    228   48 1 1 2 8
ATOM   1151  C   ASP 154 6.294  21.455 34.985 1.000 11.22
ANISOU 1151  C   ASP 154 1594   1403   1265    123   147  4 1 0
ATOM   1152  O   ASP 154 6.043  20.729 34.015 1.000 13.31
ANISOU 1152  O   ASP 154 2143   1728   1186    427   219  1 7 0
ATOM   1153  N   CYS 155 5.891  21.220 36.233 1.000 9.91
ANISOU 1153  N   CYS 155 1425   1098   1243    -76   186  2 7
ATOM   1154  CA  CYS 155 5.446  19.881 36.627 1.000 9.41
ANISOU 1154  CA  CYS 155 1294   1168   1115    -13   154  1 7 2
ATOM   1155  CB  CYS 155 6.635  19.171 37.269 1.000 10.64
ANISOU 1155  CB  CYS 155 1276   1015   1753    28 -51 - 1 2 2
ATOM   1156  SG  CYS 155 7.316  19.819 38.797 1.000 12.01
ANISOU 1156  SG  CYS 155 1376   1554   1633   -195 -199 9 5
ATOM   1157  C   CYS 155 4.138  19.885 37.423 1.000 9.66
ANISOU 1157  C   CYS 155 1301   1355   1013    115  146  2 1 6
ATOM   1158  O   CYS 155 3.215  20.645 37.064 1.000 11.61
ANISOU 1158  O   CYS 155 1349   1386   1676    130  116  2 9 4
ATOM   1159  N   GLU 156 4.021  19.033 38.442 1.000 10.26
ANISOU 1159  N   GLU 156 1263   1495   1139    -29  168  2 9 9
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ATOM   1160 CA  GLU  156 2.778   18.787 39.173 1.000 9.04
ANISOU 1160 CA  GLU  156 998 1160     1278   -76   -37 236
ATOM   1161 CB  GLU  156 2.300   17.391 38.772 1.000 11.63
ANISOU 1161 CB  GLU  156 1187    1348   1885   -67  -135 -190
ATOM   1162 CG  GLU  156 1.841   17.282 37.326 1.000 14.29
ANISOU 1162 CG  GLU  156 1741    1640   2049   -628 -507 5  0
ATOM   1163 CD  GLU  156 0.502   17.949 37.039 1.000 17.90
ANISOU 1163 CD  GLU  156 1772    2692   2336   -365 -686 137
ATOM   1164 OE1 GLU  156 -0.220  18.241 38.024 1.000 19.17
ANISOU 1164 OE1 GLU  156 1429    2973   2884   -632 -270 253
ATOM   1165 OE2 GLU  156 0.136   18.198 35.858 1.000 22.03
ANISOU 1165 OE2 GLU  156 2449    3269   2653   -243 -721 924
ATOM   1166 C   GLU  156 2.961   18.942 40.677 1.000 9.21
ANISOU 1166 C   GLU  156 1166    1135   1197   -26   239  183
ATOM   1167 O   GLU  156 2.828   17.997 41.476 1.000 11.22
ANISOU 1167 O   GLU  156 1631    1199   1434   103   162  431
ATOM   1168 N   PRO  157 3.337   20.158 41.118 1.000 10.29
ANISOU 1168 N   PRO  157 1329    1201   1381   -109  21 123
ATOM   1169 CD  PRO  157 3.527   21.407 40.359 1.000 10.17
ANISOU 1169 CD  PRO  157 1381    1093   1391   -40   -30  2  1
ATOM   1170 CA  PRO  157 3.618   20.363 42.553 1.000 10.28
ANISOU 1170 CA  PRO  157 1160    1354   1391   -12   -61  6  4
ATOM   1171 CB  PRO  157 4.173   21.805 42.590 1.000 12.44
ANISOU 1171 CB  PRO  157 1832    1567   1330   -397  20 5  8
ATOM   1172 CG  PRO  157 3.475   22.471 41.429 1.000 10.44
ANISOU 1172 CG  PRO  157 1469    1259   1237   -388  166  -15
ATOM   1173 C   PRO  157 2.387   20.269 43.450 1.000 10.83
ANISOU 1173 C   PRO  157 1206    1554   1357   -89   -61  7  6
ATOM   1174 O   PRO  157 1.247   20.422 42.992 1.000 11.38
ANISOU 1174 O   PRO  157 1157    1742   1426   -93   -64  3  3
ATOM   1175 N   LEU  158 2.561   19.988 44.742 1.000 9.91
ANISOU 1175 N   LEU  158 1011    1308   1447   -86   -53  151
ATOM   1176 CA  LEU  158 1.524   19.940 45.764 1.000 10.85
ANISOU 1176 CA  LEU  158 1319    1461   1344   -387  -2 - 3
ATOM   1177 CB  LEU  158 1.152   18.482 46.078 1.000 11.03
ANISOU 1177 CB  LEU  158 1280    1447   1464   -251  99 9  3
ATOM   1178 CG  LEU  158 0.111   18.239 47.155 1.000 12.01
ANISOU 1178 CG  LEU  158 1271    1497   1795   -303  241  128
ATOM   1179 CD1 LEU  158 -1.212  18.826 46.736 1.000 16.21
ANISOU 1179 CD1 LEU  158 1224    2249   2685   -111  41 -239
ATOM   1180 CD2 LEU  158 -0.086  16.736 47.397 1.000 17.17
ANISOU 1180 CD2 LEU  158 2656    1542   2325   -254  1273 174
ATOM   1181 C   LEU  158 1.997   20.626 47.048 1.000 11.22
ANISOU 1181 C   LEU  158 1496    1366   1402   110   -304 5
ATOM   1182 O   LEU  158 3.056   20.201 47.539 1.000 11.28
ANISOU 1182 O   LEU  158 1283    1368   1635   20 -262  7 5
ATOM   1183 N   LEU  159 1.234   21.599 47.548 1.000 10.86
ANISOU 1183 N   LEU  159 1103    1744   1278   68 -180  - 70
ATOM   1184 CA  LEU  159 1.540   22.278 48.797 1.000 11.62
ANISOU 1184 CA  LEU  159 1247    1761   1407   -59  -68  -180
ATOM   1185 CB  LEU  159 1.494   23.802 48.640 1.000 12.44
ANISOU 1185 CB  LEU  159 1624    1747   1354   -209 -73  - 33
ATOM   1186 CG  LEU  159 1.633   24.635 49.934 1.000 12.83
ANISOU 1186 CG  LEU  159 1600    1698   1576   246  -54  -215
ATOM   1187 CD1 LEU  159 2.947   24.435 50.651 1.000 14.28
ANISOU 1187 CD1 LEU  159 2019    2250   1158   177  -292 104
ATOM   1188 CD2 LEU  159 1.442   26.134 49.640 1.000 13.33
ANISOU 1188 CD2 LEU  159 1802    1721   1543   87 -87 - 20
ATOM   1189 C   LEU  159 0.537   21.846 49.868 1.000 11.24
ANISOU 1189 C   LEU  159 1393    1474   1404   -174  -9 -271
ATOM   1190 O   LEU  159 -0.665  21.940 49.620 1.000 13.70
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ANISOU	1190	O	LEU	159	1354	2395	1457	-328	34	-269
ATOM	1191	N	ARG	160	1.013	21.385	51.010	1.000	14.59	
ANISOU	1191	N	ARG	160	1737	2569	1239	-390	-128	-224
ATOM	1192	CA	ARG	160	0.158	21.030	52.153	1.000	13.94	
ANISOU	1192	CA	ARG	160	1265	2631	1402	157	-137	92
ATOM	1193	CB	ARG	160	0.161	19.528	52.343	1.000	18.20	
ANISOU	1193	CB	ARG	160	1932	2645	2338	-301	32	193
ATOM	1194	CG	ARG	160	-0.423	18.661	51.252	1.000	25.12	
ANISOU	1194	CG	ARG	160	3451	2902	3191	-653	-787	23
ATOM	1195	CD	ARG	160	-0.765	17.301	51.831	1.000	31.98	
ANISOU	1195	CD	ARG	160	4825	3598	3729	-1994	-905	321
ATOM	1196	NE	ARG	160	-1.284	16.322	50.896	1.000	26.15	
ANISOU	1196	NE	ARG	160	3392	2957	3587	-739	-1056	310
ATOM	1197	CZ	ARG	160	-0.970	15.044	50.779	1.000	25.30	
ANISOU	1197	CZ	ARG	160	3195	3390	3028	94	-785	295
ATOM	1198	NH1	ARG	160	-0.063	14.433	51.552	1.000	31.26	
ANISOU	1198	NH1	ARG	160	3654	4142	4080	-629	-1089	2054
ATOM	1199	NH2	ARG	160	-1.572	14.308	49.850	1.000	28.82	
ANISOU	1199	NH2	ARG	160	4020	3122	3807	-13	-966	-90
ATOM	1200	C	ARG	160	0.649	21.669	53.447	1.000	15.12	
ANISOU	1200	C	ARG	160	1649	2863	1232	104	-66	125
ATOM	1201	O	ARG	160	1.804	21.556	53.863	1.000	17.09	
ANISOU	1201	O	ARG	160	1291	3411	1791	-400	74	-812
ATOM	1202	N	PHE	161	-0.258	22.369	54.114	1.000	14.95	
ANISOU	1202	N	PHE	161	1512	2506	1660	-253	-8	-146
ATOM	1203	CA	PHE	161	-0.036	22.949	55.427	1.000	13.27	
ANISOU	1203	CA	PHE	161	1600	1681	1760	-9	-249	-41
ATOM	1204	CB	PHE	161	-0.587	24.381	55.472	1.000	16.82	
ANISOU	1204	CB	PHE	161	1594	1947	2851	384	58	64
ATOM	1205	CG	PHE	161	-0.317	25.109	56.771	1.000	22.56	
ANISOU	1205	CG	PHE	161	2464	2424	3684	-39	790	-1067
ATOM	1206	CD1	PHE	161	-1.175	25.010	57.849	1.000	26.03	
ANISOU	1206	CD1	PHE	161	3353	2919	3620	267	1106	-702
ATOM	1207	CD2	PHE	161	0.822	25.901	56.885	1.000	25.34	
ANISOU	1207	CD2	PHE	161	2353	3265	4011	-179	-161	-738
ATOM	1208	CE1	PHE	161	-0.943	25.660	59.051	1.000	30.50	
ANISOU	1208	CE1	PHE	161	4784	3324	3481	-972	1456	-620
ATOM	1209	CE2	PHE	161	1.061	26.553	58.080	1.000	26.10	
ANISOU	1209	CE2	PHE	161	2546	3067	4302	-129	281	-1127
ATOM	1210	CZ	PHE	161	0.199	26.438	59.164	1.000	30.06	
ANISOU	1210	CZ	PHE	161	3839	3197	4386	-152	774	-677
ATOM	1211	C	PHE	161	-0.737	22.073	56.447	1.000	13.93	
ANISOU	1211	C	PHE	161	1842	1946	1503	-334	-277	-240
ATOM	1212	O	PHE	161	-1.916	21.843	56.270	1.000	18.26	
ANISOU	1212	O	PHE	161	2000	3277	1662	-744	-399	475
ATOM	1213	N	ARG	162	-0.090	21.631	57.503	1.000	16.29	
ANISOU	1213	N	ARG	162	2063	2516	1610	-937	-523	77
ATOM	1214	CA	ARG	162	-0.635	20.719	58.483	1.000	15.62	
ANISOU	1214	CA	ARG	162	1772	2512	1650	-519	-266	76
ATOM	1215	C	ARG	162	-0.476	21.312	59.890	1.000	17.48	
ANISOU	1215	C	ARG	162	1855	3131	1656	-603	-186	-76
ATOM	1216	O	ARG	162	0.609	21.734	60.251	1.000	17.23	
ANISOU	1216	O	ARG	162	1928	3063	1557	-771	-42	-160
ATOM	1217	CB	ARG	162	0.081	19.374	58.458	1.000	21.99	
ANISOU	1217	CB	ARG	162	3309	2318	2727	-272	-737	-22
ATOM	1218	CG	ARG	162	-0.573	18.322	59.348	1.000	26.07	
ANISOU	1218	CG	ARG	162	3488	2375	4041	489	655	280
ATOM	1219	CD	ARG	162	-0.231	16.896	58.886	1.000	25.85	
ANISOU	1219	CD	ARG	162	3106	2221	4495	418	-223	9
ATOM	1220	NE	ARG	162	-0.943	15.916	59.698	1.000	28.83	
ANISOU	1220	NE	ARG	162	4379	2437	4139	-181	332	-177

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ATOM   1221 CZ  ARG 162 -0.642  14.638  59.879 1.000 27.99
ANISOU 1221 CZ  ARG 162 4271    2497    3868    -179  962  8  4
ATOM   1222 NH1 ARG 162 0.429   14.119  59.273 1.000 26.61
ANISOU 1222 NH1 ARG 162 3200    3167    3742    -91   -126 -268
ATOM   1223 NH2 ARG 162 -1.408  13.883  60.658 1.000 34.20
ANISOU 1223 NH2 ARG 162 3807    3522    5663    -986  702  780
ATOM   1224 N   TYR 163 -1.570  21.296  60.622 1.000 16.77
ANISOU 1224 N   TYR 163 1803    2865    1705    -484  -194 8  4
ATOM   1225 CA  TYR 163 -1.627  21.749  61.997 1.000 16.73
ANISOU 1225 CA  TYR 163 1819    2770    1766    -692  -51  4  0
ATOM   1226 CB  TYR 163 -2.712  22.804  62.116 1.000 18.99
ANISOU 1226 CB  TYR 163 2479    2560    2175    -427  -303 -214
ATOM   1227 CG  TYR 163 -3.173  23.206  63.488 1.000 23.52
ANISOU 1227 CG  TYR 163 2573    3821    2544    -16   -335 -868
ATOM   1228 CD1 TYR 163 -2.316  23.848  64.367 1.000 31.80
ANISOU 1228 CD1 TYR 163 3613    5005    3466    -1151 304  -2338
ATOM   1229 CE1 TYR 163 -2.731  24.222  65.625 1.000 40.74
ANISOU 1229 CE1 TYR 163 5855    5676    3950    -1906 976  -3116
ATOM   1230 CD2 TYR 163 -4.459  22.965  63.931 1.000 32.55
ANISOU 1230 CD2 TYR 163 3307    5654    3408    -1066 639  -2340
ATOM   1231 CE2 TYR 163 -4.902  23.332  65.189 1.000 42.99
ANISOU 1231 CE2 TYR 163 5626    6630    4080    -2352 1989 -2949
ATOM   1232 CZ  TYR 163 -4.017  23.960  66.025 1.000 42.52
ANISOU 1232 CZ  TYR 163 6281    5799    4075    -1721 1943 -3714
ATOM   1233 OH  TYR 163 -4.380  24.351  67.274 1.000 48.87
ANISOU 1233 OH  TYR 163 8167    6831    3569    -269  1801 -3052
ATOM   1234 C   TYR 163 -1.935  20.551  62.896 1.000 17.90
ANISOU 1234 C   TYR 163 2872    2353    1575    -894  -465 -173
ATOM   1235 O   TYR 163 -2.933  19.858  62.653 1.000 18.12
ANISOU 1235 O   TYR 163 2694    2130    2060    -732  -615 6  7
ATOM   1236 N   PHE 164 -1.112  20.326  63.898 1.000 18.32
ANISOU 1236 N   PHE 164 2516    2621    1826    -614  -402 - 90
ATOM   1237 CA  PHE 164 -1.340  19.381  64.984 1.000 23.44
ANISOU 1237 CA  PHE 164 4176    2692    2038    -727  -669 2 19
ATOM   1238 CB  PHE 164 -0.073  18.617  65.327 1.000 26.02
ANISOU 1238 CB  PHE 164 4594    2824    2470    -459  -822 3 79
ATOM   1239 CG  PHE 164 0.407   17.669  64.231 1.000 29.00
ANISOU 1239 CG  PHE 164 4118    3639    3263    -518  -427 - 254
ATOM   1240 CD1 PHE 164 1.224   18.118  63.205 1.000 27.11
ANISOU 1240 CD1 PHE 164 3040    4013    3249    -198  -821 4
ATOM   1241 CD2 PHE 164 0.051   16.332  64.240 1.000 28.37
ANISOU 1241 CD2 PHE 164 3935    3139    3704    472   30 - 64
ATOM   1242 CE1 PHE 164 1.657   17.248  62.223 1.000 28.13
ANISOU 1242 CE1 PHE 164 2730    3926    4034    -43   -229 6
ATOM   1243 CE2 PHE 164 0.459   15.464  63.250 1.000 31.71
ANISOU 1243 CE2 PHE 164 4719    3694    3635    -293  657  - 383
ATOM   1244 CZ  PHE 164 1.276   15.924  62.234 1.000 30.26
ANISOU 1244 CZ  PHE 164 3827    3808    3862    0  300 1 26
ATOM   1245 C   PHE 164 -1.775  20.160  66.228 1.000 24.65
ANISOU 1245 C   PHE 164 3541    4049    1777    -1025 -455 3  7
ATOM   1246 O   PHE 164 -0.889  20.713  66.885 1.000 25.54
ANISOU 1246 O   PHE 164 3520    4167    2019    -921  -440 - 257
ATOM   1247 N   PRO 165 -3.058  20.293  66.527 1.000 32.24
ANISOU 1247 N   PRO 165 3641    5095    3513    -1894 266  - 680
ATOM   1248 CA  PRO 165 -3.486  21.012  67.720 1.000 32.98
ANISOU 1248 CA  PRO 165 3570    5737    3225    -1271 397  - 322
ATOM   1249 C   PRO 165 -2.854  20.429  68.986 1.000 38.48
ANISOU 1249 C   PRO 165 4355    6808    3457    -1872 40 3 43
ATOM   1250 O   PRO 165 -2.551  19.230  69.034 1.000 53.87
ANISOU 1250 O   PRO 165 9948    7012    3507    -959  692  1750
ATOM   1251 CB  PRO 165 -5.001  20.820  67.769 1.000 37.76
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ANISOU 1251  CB  PRO  165 3640    6479    4227    -1488 380  -717
ATOM   1252  CG  PRO  165 -5.417  20.048  66.569  1.000 36.16
ANISOU 1252  CG  PRO  165 3341    6449    3948    -518  -349 -398
ATOM   1253  CD  PRO  165 -4.197  19.816  65.734  1.000 35.70
ANISOU 1253  CD  PRO  165 3440    6296    3828    -1656 -5  -604
ATOM   1254  N   LEU  178 4.459   8.087   66.987  1.000 36.23
ANISOU 1254  N   LEU  178 4509    3338    5918    -26   1216 1175
ATOM   1255  CA  LEU  178 4.994   9.117   66.116  1.000 28.63
ANISOU 1255  CA  LEU  178 3397    3170    4312    377   1344 401
ATOM   1256  CB  LEU  178 5.882   8.534   65.027  1.000 30.08
ANISOU 1256  CB  LEU  178 3497    3245    4688    760   752  -620
ATOM   1257  CG  LEU  178 7.245   7.948   65.348  1.000 29.43
ANISOU 1257  CG  LEU  178 3557    2950    4674    667   371  -979
ATOM   1258  CD1 LEU  178 7.859   7.367   64.073  1.000 32.13
ANISOU 1258  CD1 LEU  178 2972    4524    4713    586   810  -790
ATOM   1259  CD2 LEU  178 8.208   8.964   65.937  1.000 41.71
ANISOU 1259  CD2 LEU  178 5303    3695    6850    356   -1656 -1154
ATOM   1260  C   LEU  178 3.885   9.909   65.420  1.000 27.18
ANISOU 1260  C   LEU  178 2107    3534    4686    -175  1776 833
ATOM   1261  O   LEU  178 2.845   9.351   65.086  1.000 39.60
ANISOU 1261  O   LEU  178 2407    4624    8016    -1253 1290 2183
ATOM   1262  N   ARG  179 4.128   11.200  65.160  1.000 25.65
ANISOU 1262  N   ARG  179 2220    3437    4089    -216  878  741
ATOM   1263  CA  ARG  179 3.231   11.973  64.321  1.000 25.04
ANISOU 1263  CA  ARG  179 1860    3289    4365    69 641 1 5
ATOM   1264  C   ARG  179 3.297   11.572  62.852  1.000 24.51
ANISOU 1264  C   ARG  179 2158    2721    4434    39 99  -89
ATOM   1265  O   ARG  179 2.295   11.687  62.139  1.000 28.60
ANISOU 1265  O   ARG  179 2545    3242    5079    441   -332 -256
ATOM   1266  CB  ARG  179 3.517   13.480  64.451  1.000 28.58
ANISOU 1266  CB  ARG  179 3980    3317    3561    -110  -843 5  7
ATOM   1267  CG  ARG  179 2.936   14.092  65.724  1.000 30.01
ANISOU 1267  CG  ARG  179 3817    3725    3862    57 -957  -372
ATOM   1268  CD  ARG  179 3.307   15.570  65.757  1.000 31.51
ANISOU 1268  CD  ARG  179 4457    3675    3840    90 -1514 -338
ATOM   1269  NE  ARG  179 2.925   16.126  67.058  1.000 37.82
ANISOU 1269  NE  ARG  179 7035    3190    4144    153   -310 -15
ATOM   1270  CZ  ARG  179 2.897   17.425  67.292  1.000 39.43
ANISOU 1270  CZ  ARG  179 8420    3029    3532    -479  580  400
ATOM   1271  NH1 ARG  179 3.213   18.286  66.331  1.000 59.73
ANISOU 1271  NH1 ARG  179 11745   4676    6273    -1045 3177 1722
ATOM   1272  NH2 ARG  179 2.548   17.896  68.457  1.000 33.13
ANISOU 1272  NH2 ARG  179 5661    3832    3094    275   -1463 -173
ATOM   1273  N   MET  180 4.455   11.099  62.424  1.000 21.43
ANISOU 1273  N   MET  180 2013    2457    3674    -395  108  -222
ATOM   1274  CA  MET  180 4.695   10.539  61.108  1.000 20.07
ANISOU 1274  CA  MET  180 2346    1965    3315    -349  -300 151
ATOM   1275  C   MET  180 5.802   9.482   61.182  1.000 17.33
ANISOU 1275  C   MET  180 2251    2080    2254    -332  -86  337
ATOM   1276  O   MET  180 6.894   9.757   61.677  1.000 18.52
ANISOU 1276  O   MET  180 2237    2019    2781    -398  -79  5 2
ATOM   1277  CB  MET  180 5.041   11.646  60.136  1.000 22.64
ANISOU 1277  CB  MET  180 2571    2321    3709    -197  -549 683
ATOM   1278  CG  MET  180 5.065   11.367  58.678  1.000 27.90
ANISOU 1278  CG  MET  180 3918    3095    3588    -453  -654 913
ATOM   1279  SD  MET  180 4.945   12.838  57.629  1.000 25.01
ANISOU 1279  SD  MET  180 2936    2942    3626    -399  124  851
ATOM   1280  CE  MET  180 4.385   12.010  56.147  1.000 37.00
ANISOU 1280  CE  MET  180 5917    3450    4690    -258  -2680 1204
ATOM   1281  N   ALA  181 5.467   8.295   60.680  1.000 16.99
ANISOU 1281  N   ALA  181 2144    2139    2174    -90   -558 299
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ATOM   1282 CA  ALA 181 6.396   7.168   60.676 1.000 16.12
ANISOU 1282 CA  ALA 181 2275    1958    1890    -171  -343 6 0 2
ATOM   1283 CB  ALA 181 5.668   5.891   60.279 1.000 20.24
ANISOU 1283 CB  ALA 181 2857    2158    2673    -648  694  1 0 6
ATOM   1284 C   ALA 181 7.576   7.409   59.738 1.000 15.43
ANISOU 1284 C   ALA 181 2223    1717    1925    -315  -369 4 3 2
ATOM   1285 O   ALA 181 7.458   8.198   58.783 1.000 15.49
ANISOU 1285 O   ALA 181 2268    1761    1858    -173  -296 4 3 4
ATOM   1286 N   PRO 182 8.698   6.733   59.986 1.000 16.03
ANISOU 1286 N   PRO 182 2517    1745    1829    32 -78 5 3 1
ATOM   1287 CD  PRO 182 8.983   5.802   61.101 1.000 19.61
ANISOU 1287 CD  PRO 182 2321    2908    2221    -210  -306 1 2 4 0
ATOM   1288 CA  PRO 182 9.865   6.907   59.076 1.000 14.78
ANISOU 1288 CA  PRO 182 2573    1336    1706    -101  -86  2 9 9
ATOM   1289 CB  PRO 182 10.914  5.948   59.649 1.000 16.20
ANISOU 1289 CB  PRO 182 2570    1978    1607    170   -251 7  7
ATOM   1290 CG  PRO 182 10.479  5.713   61.066 1.000 19.28
ANISOU 1290 CG  PRO 182 2301    3071    1952    -199  -245 1 0 0 1
ATOM   1291 C   PRO 182 9.541   6.571   57.627 1.000 14.90
ANISOU 1291 C   PRO 182 2230    1658    1772    -421  -262 3 4 0
ATOM   1292 O   PRO 182 8.920   5.573   57.249 1.000 15.38
ANISOU 1292 O   PRO 182 2301    1587    1957    -467  -482 5 3 9
ATOM   1293 N   HIS 183 9.969   7.460   56.730 1.000 12.28
ANISOU 1293 N   HIS 183 1737    1312    1617    -154  -284 1 5 6
ATOM   1294 CA  HIS 183 9.733   7.354   55.300 1.000 11.90
ANISOU 1294 CA  HIS 183 1413    1495    1614    -254  -351 3  5
ATOM   1295 CB  HIS 183 8.300   7.824   54.922 1.000 12.43
ANISOU 1295 CB  HIS 183 1399    1368    1957    -128  -241 1 1 2
ATOM   1296 CG  HIS 183 8.168   9.314   55.089 1.000 11.36
ANISOU 1296 CG  HIS 183 1349    1369    1600    -367  -296 5  6
ATOM   1297 CD2 HIS 183 8.259   10.374  54.249 1.000 12.03
ANISOU 1297 CD2 HIS 183 1684    1296    1589    -43   157  - 1 0
ATOM   1298 ND1 HIS 183 7.989   9.858   56.339 1.000 13.27
ANISOU 1298 ND1 HIS 183 1901    1439    1700    -65   267  1 9 3
ATOM   1299 CE1 HIS 183 7.943   11.187  56.244 1.000 12.43
ANISOU 1299 CE1 HIS 183 1939    1490    1296    77 -244  1 5 0
ATOM   1300 NE2 HIS 183 8.101   11.515  54.992 1.000 11.04
ANISOU 1300 NE2 HIS 183 1560    1437    1199    215   -232 4  8
ATOM   1301 C   HIS 183 10.749  8.176   54.515 1.000 12.27
ANISOU 1301 C   HIS 183 1446    1639    1577    -303  -282 - 6 7
ATOM   1302 O   HIS 183 11.433  9.032   55.064 1.000 12.94
ANISOU 1302 O   HIS 183 1496    1915    1505    -558  -292 1  5
ATOM   1303 N   TYR 184 10.849  7.907   53.215 1.000 10.61
ANISOU 1303 N   TYR 184 1453    1027    1552    -41   -380 1 1 0
ATOM   1304 CA  TYR 184 11.483  8.800   52.256 1.000 11.36
ANISOU 1304 CA  TYR 184 1475    1104    1738    -71   -264 1 7 8
ATOM   1305 CB  TYR 184 12.628  8.151   51.481 1.000 11.79
ANISOU 1305 CB  TYR 184 1631    1114    1734    -62   -197 3  4
ATOM   1306 CG  TYR 184 12.368  6.907   50.677 1.000 11.29
ANISOU 1306 CG  TYR 184 1680    921 1688    225   -893  1 7 4
ATOM   1307 CD1 TYR 184 12.156  5.659   51.268 1.000 11.76
ANISOU 1307 CD1 TYR 184 1663    927 1879    388   -487  1 9 0
ATOM   1308 CE1 TYR 184 11.911  4.526   50.492 1.000 12.64
ANISOU 1308 CE1 TYR 184 1960    878 1964    173   -40 1 8 2
ATOM   1309 CD2 TYR 184 12.333  6.949   49.279 1.000 11.13
ANISOU 1309 CD2 TYR 184 1252    1302    1674    109   -283 9  3
ATOM   1310 CE2 TYR 184 12.102  5.834   48.502 1.000 12.93
ANISOU 1310 CE2 TYR 184 1944    1422    1546    49 -384  7  3
ATOM   1311 CZ  TYR 184 11.898  4.611   49.121 1.000 13.14
ANISOU 1311 CZ  TYR 184 1717    1304    1972    30 -611  6  7
ATOM   1312 OH  TYR 184 11.663  3.490   48.343 1.000 15.45
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ANISOU 1312  OH  TYR  184 2028    1471    2373    42 -476  -247
ATOM   1313  C   TYR  184 10.447  9.390   51.314  1.000 11.50
ANISOU 1313  C   TYR  184 1445    1215    1709    -187  -201 348
ATOM   1314  O   TYR  184 9.362   8.797   51.089  1.000 11.75
ANISOU 1314  O   TYR  184 1305    1308    1853    -106  -171 427
ATOM   1315  N   ASP  185 10.784  10.557  50.743  1.000 10.79
ANISOU 1315  N   ASP  185 1581    1069    1449    -141  -132 118
ATOM   1316  CA  ASP  185 9.861   11.218  49.815  1.000 9.10
ANISOU 1316  CA  ASP  185 1089    1093    1277    -326  23 206
ATOM   1317  CB  ASP  185 9.934   12.743  49.886  1.000 10.13
ANISOU 1317  CB  ASP  185 1427    1095    1327    -298  -178 177
ATOM   1318  CG  ASP  185 9.540   13.388  51.185  1.000 11.79
ANISOU 1318  CG  ASP  185 1797    1350    1333    -250  -149 1 1
ATOM   1319  OD1 ASP  185 9.681   14.638  51.278  1.000 13.79
ANISOU 1319  OD1 ASP  185 2050    1316    1875    135   -52  -26
ATOM   1320  OD2 ASP  185 9.114   12.755  52.189  1.000 13.31
ANISOU 1320  OD2 ASP  185 1805    1848    1405    -411  -63  105
ATOM   1321  C   ASP  185 10.098  10.759  48.371  1.000 9.44
ANISOU 1321  C   ASP  185 1036    1150    1401    -309  -26  100
ATOM   1322  O   ASP  185 11.234  10.469  48.005  1.000 10.64
ANISOU 1322  O   ASP  185 1167    1376    1500    -127  -35  -206
ATOM   1323  N   LEU  186 9.038   10.684  47.568  1.000 10.09
ANISOU 1323  N   LEU  186 1211    1186    1437    -272  -177 - 58
ATOM   1324  CA  LEU  186 9.124   10.312  46.161  1.000 10.60
ANISOU 1324  CA  LEU  186 1641    986  1401    -239  -52 - 44
ATOM   1325  CB  LEU  186 8.030   9.295   45.798  1.000 11.32
ANISOU 1325  CB  LEU  186 1652    929  1721    -111  17 - 479
ATOM   1326  CG  LEU  186 7.989   7.977   46.602  1.000 12.60
ANISOU 1326  CG  LEU  186 1408    1039    2340    -263  -200 - 166
ATOM   1327  CD1 LEU  186 6.896   7.064   46.028  1.000 16.64
ANISOU 1327  CD1 LEU  186 1900    1373    3049    -634  -398 - 135
ATOM   1328  CD2 LEU  186 9.356   7.332   46.629  1.000 13.84
ANISOU 1328  CD2 LEU  186 1438    1245    2575    -155  443  283
ATOM   1329  C   LEU  186 9.024   11.521  45.223  1.000 10.90
ANISOU 1329  C   LEU  186 1327    1211    1603    -3 -451  164
ATOM   1330  O   LEU  186 8.768   11.406  44.031  1.000 13.60
ANISOU 1330  O   LEU  186 2067    1608    1494    -211  -321 103
ATOM   1331  N   SER  187 9.264   12.705  45.734  1.000 10.71
ANISOU 1331  N   SER  187 1546    1129    1393    -76  -282 318
ATOM   1332  CA  SER  187 9.401   13.943  44.998  1.000 10.49
ANISOU 1332  CA  SER  187 1427    1191    1370    195   -107 488
ATOM   1333  CB  SER  187 9.221   15.103  46.002  1.000 10.56
ANISOU 1333  CB  SER  187 1105    1048    1857    298   161  532
ATOM   1334  OG  SER  187 10.430  14.918  46.726  1.000 13.01
ANISOU 1334  OG  SER  187 1343    1432    2169    -132  -295 201
ATOM   1335  C   SER  187 10.774  14.062  44.336  1.000 10.47
ANISOU 1335  C   SER  187 1447    862  1669    135   -3 145
ATOM   1336  O   SER  187 11.684  13.246  44.513  1.000 10.54
ANISOU 1336  O   SER  187 1577    799  1629    183   -91 - 77
ATOM   1337  N   MET  188 10.962  15.095  43.502  1.000 9.78
ANISOU 1337  N   MET  188 1419    978  1318    147   44 74
ATOM   1338  CA  MET  188 12.267  15.584  43.065  1.000 9.94
ANISOU 1338  CA  MET  188 1394    942  1441    182   58 37
ATOM   1339  CB  MET  188 12.128  16.543  41.891  1.000 10.89
ANISOU 1339  CB  MET  188 1523    840  1774    98  48 227
ATOM   1340  CG  MET  188 13.385  17.258  41.470  1.000 11.40
ANISOU 1340  CG  MET  188 1403    1172    1756    46 -51 214
ATOM   1341  SD  MET  188 14.687  16.134  40.891  1.000 12.71
ANISOU 1341  SD  MET  188 1619    1272    1940    139   137  198
ATOM   1342  CE  MET  188 16.061  17.267  40.790  1.000 13.86
ANISOU 1342  CE  MET  188 1862    1399    2003    -2 911 - 90
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ATOM   1343  C   MET  188  12.946  16.217  44.291  1.000 12.13
ANISOU 1343  C   MET  188   1325    1586    1698     169   -18   -285
ATOM   1344  O   MET  188  13.971  15.727  44.804  1.000 11.52
ANISOU 1344  O   MET  188   1288    1553    1535     144   132     8     7
ATOM   1345  N   VAL  189  12.362  17.290  44.838  1.000 10.00
ANISOU 1345  N   VAL  189   1290    1217    1292      53  -175     6
ATOM   1346  CA  VAL  189  12.745  17.894  46.099  1.000  9.70
ANISOU 1346  CA  VAL  189   1209    1057    1420    -212   -45   -19
ATOM   1347  CB  VAL  189  13.618  19.154  45.979  1.000  9.97
ANISOU 1347  CB  VAL  189   1288    1103    1398    -238   129   189
ATOM   1348  CG1 VAL  189  14.953  18.837  45.266  1.000 13.45
ANISOU 1348  CG1 VAL  189   1334    1410    2368    -236   390   143
ATOM   1349  CG2 VAL  189  12.899  20.289  45.264  1.000 12.24
ANISOU 1349  CG2 VAL  189   1715    1242    1693     -25   150   295
ATOM   1350  C   VAL  189  11.469  18.245  46.871  1.000 10.10
ANISOU 1350  C   VAL  189   1089    1600    1149    -456  -156   -73
ATOM   1351  O   VAL  189  10.405  18.399  46.250  1.000  9.53
ANISOU 1351  O   VAL  189   1153    1249    1217    -222  -190     8
ATOM   1352  N   THR  190  11.609  18.327  48.187  1.000  8.66
ANISOU 1352  N   THR  190   1273     894   1123      15  -202   127
ATOM   1353  CA  THR  190  10.565  18.771  49.091  1.000  9.64
ANISOU 1353  CA  THR  190   1350    1167    1147     -11  -228   -99
ATOM   1354  CB  THR  190  10.194  17.699  50.132  1.000 10.69
ANISOU 1354  CB  THR  190   1231    1196    1635    -300   121   -54
ATOM   1355  OG1 THR  190   9.662  16.586  49.501  1.000 12.45
ANISOU 1355  OG1 THR  190   1333    1341    2055    -140  -258   -48
ATOM   1356  CG2 THR  190   9.038  18.131  51.019  1.000 13.59
ANISOU 1356  CG2 THR  190   1121    2222    1821    -272   151  -195
ATOM   1357  C   THR  190  11.058  19.976  49.891  1.000  9.23
ANISOU 1357  C   THR  190   1257    1096    1152    -102  -336   -49
ATOM   1358  O   THR  190  12.149  19.867  50.447  1.000 10.54
ANISOU 1358  O   THR  190   1322    1292    1390      -5  -359   -122
ATOM   1359  N   LEU  191  10.313  21.064  49.978  1.000 10.23
ANISOU 1359  N   LEU  191   1319    1167    1401     -71  -177   -133
ATOM   1360  CA  LEU  191  10.691  22.241  50.770  1.000 10.19
ANISOU 1360  CA  LEU  191   1259    1176    1438       0  -294   -142
ATOM   1361  CB  LEU  191  10.604  23.511  49.910  1.000 11.52
ANISOU 1361  CB  LEU  191   1203    1185    1990    -118  -601     3     2
ATOM   1362  CG  LEU  191  11.897  23.898  49.167  1.000 13.23
ANISOU 1362  CG  LEU  191   1898    1710    1419    -391  -358     9     7
ATOM   1363  CD1 LEU  191  12.333  22.794  48.218  1.000 15.25
ANISOU 1363  CD1 LEU  191   1685    2018    2091    -476  -214   -305
ATOM   1364  CD2 LEU  191  11.717  25.231  48.448  1.000 17.46
ANISOU 1364  CD2 LEU  191   2310    2044    2281     -14    17   604
ATOM   1365  C   LEU  191   9.798  22.328  52.006  1.000 11.93
ANISOU 1365  C   LEU  191   1275    1677    1579      56  -190   -372
ATOM   1366  O   LEU  191   8.560  22.262  51.868  1.000 13.49
ANISOU 1366  O   LEU  191   1276    2173    1676      1  -192   -601
ATOM   1367  N   ILE  192  10.394  22.483  53.190  1.000 11.06
ANISOU 1367  N   ILE  192   1115    1603    1487    -111   -92   -108
ATOM   1368  CA  ILE  192   9.671  22.539  54.443  1.000 11.13
ANISOU 1368  CA  ILE  192   1071    1638    1521      11  -173   -149
ATOM   1369  CB  ILE  192   9.927  21.304  55.330  1.000 12.94
ANISOU 1369  CB  ILE  192   2099    1586    1232     -65    -9   -233
ATOM   1370  CG2 ILE  192   9.221  21.428  56.673  1.000 16.06
ANISOU 1370  CG2 ILE  192   2479    1983    1641    -206   426   -215
ATOM   1371  CG1 ILE  192   9.512  20.028  54.590  1.000 15.51
ANISOU 1371  CG1 ILE  192   2633    1658    1601    -400   -48   -175
ATOM   1372  CD1 ILE  192   9.845  18.765  55.339  1.000 25.71
ANISOU 1372  CD1 ILE  192   5869    1608    2290    -175  -1566   -301
ATOM   1373  C   ILE  192   9.966  23.809  55.253  1.000 11.47
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ANISOU	1373	C	ILE	192	1330	1603	1427	-4	-222	-122
ATOM	1374	O	ILE	192	11.123	24.106	55.567	1.000	13.33	
ANISOU	1374	O	ILE	192	1344	1738	1981	-96	-289	-219
ATOM	1375	N	GLN	193	8.904	24.525	55.602	1.000	15.78	
ANISOU	1375	N	GLN	193	1316	2462	2219	-64	-5	-975
ATOM	1376	CA	GLN	193	8.987	25.653	56.533	1.000	14.56	
ANISOU	1376	CA	GLN	193	1582	1858	2091	212	-304	-529
ATOM	1377	CB	GLN	193	8.449	26.975	56.020	1.000	20.03	
ANISOU	1377	CB	GLN	193	2226	2203	3180	318	-329	142
ATOM	1378	CG	GLN	193	9.203	27.684	54.914	1.000	23.86	
ANISOU	1378	CG	GLN	193	3399	2492	3174	313	45	280
ATOM	1379	CD	GLN	193	8.665	29.079	54.675	1.000	22.92	
ANISOU	1379	CD	GLN	193	3250	2363	3097	78	-477	205
ATOM	1380	OE1	GLN	193	7.603	29.292	54.099	1.000	27.68	
ANISOU	1380	OE1	GLN	193	4175	3310	3031	552	-1214	2 9
ATOM	1381	NE2	GLN	193	9.411	30.075	55.134	1.000	27.01	
ANISOU	1381	NE2	GLN	193	3187	2667	4408	-440	124	1 7
ATOM	1382	C	GLN	193	8.216	25.265	57.804	1.000	15.14	
ANISOU	1382	C	GLN	193	1945	1827	1982	136	-174	-722
ATOM	1383	O	GLN	193	7.147	24.662	57.714	1.000	27.80	
ANISOU	1383	O	GLN	193	2523	6225	1817	-1586	-592	235
ATOM	1384	N	GLN	194	8.714	25.552	58.978	1.000	19.80	
ANISOU	1384	N	GLN	194	2994	2502	2025	-632	-752	3 3
ATOM	1385	CA	GLN	194	8.100	25.080	60.213	1.000	22.89	
ANISOU	1385	CA	GLN	194	3961	2626	2110	493	-20	5 2
ATOM	1386	C	GLN	194	7.763	26.236	61.141	1.000	27.79	
ANISOU	1386	C	GLN	194	4886	2757	2916	823	25	-262
ATOM	1387	O	GLN	194	8.424	27.258	60.983	1.000	30.03	
ANISOU	1387	O	GLN	194	4727	3168	3516	368	-259	-910
ATOM	1388	CB	GLN	194	9.086	24.170	60.950	1.000	23.97	
ANISOU	1388	CB	GLN	194	3952	3133	2021	846	483	352
ATOM	1389	CG	GLN	194	9.398	22.835	60.314	1.000	21.94	
ANISOU	1389	CG	GLN	194	2740	3238	2358	683	-182	-10
ATOM	1390	CD	GLN	194	10.546	22.148	61.052	1.000	20.51	
ANISOU	1390	CD	GLN	194	2450	3433	1911	509	-321	-429
ATOM	1391	OE1	GLN	194	11.707	22.142	60.627	1.000	20.80	
ANISOU	1391	OE1	GLN	194	2245	2996	2662	-171	-382	-681
ATOM	1392	NE2	GLN	194	10.223	21.585	62.197	1.000	24.91	
ANISOU	1392	NE2	GLN	194	2539	3902	3023	210	-365	760
ATOM	1393	N	THR	195	6.817	26.035	62.030	1.000	32.47	
ANISOU	1393	N	THR	195	5716	2729	3891	1095	1056	-616
ATOM	1394	CA	THR	195	6.588	26.708	63.282	1.000	35.83	
ANISOU	1394	CA	THR	195	6329	3539	3748	1011	999	-722
ATOM	1395	CB	THR	195	5.263	27.492	63.357	1.000	37.96	
ANISOU	1395	CB	THR	195	5756	4304	4365	647	2095	-1151
ATOM	1396	OG1	THR	195	4.191	26.576	63.604	1.000	48.36	
ANISOU	1396	OG1	THR	195	6874	6076	5423	-806	2581	-1842
ATOM	1397	CG2	THR	195	4.958	28.175	62.033	1.000	44.54	
ANISOU	1397	CG2	THR	195	2944	7471	6510	-872	-963	621
ATOM	1398	C	THR	195	6.590	25.684	64.429	1.000	48.86	
ANISOU	1398	C	THR	195	10133	4924	3508	-321	-1356	-221
ATOM	1399	O	THR	195	6.122	24.544	64.293	1.000	64.12	
ANISOU	1399	O	THR	195	13267	4150	6945	-264	-4541	1682
ATOM	1400	N	PHE	201	12.035	21.374	72.205	1.000	71.12	
ANISOU	1400	N	PHE	201	13961	9034	4028	-5932	-1658	-1741
ATOM	1401	CA	PHE	201	11.775	20.053	71.629	1.000	49.44	
ANISOU	1401	CA	PHE	201	7918	7543	3326	-3128	1317	-1488
ATOM	1402	CB	PHE	201	10.469	19.464	72.181	1.000	47.85	
ANISOU	1402	CB	PHE	201	7119	6892	4168	-1869	1937	-1899
ATOM	1403	CG	PHE	201	10.130	18.113	71.545	1.000	46.41	
ANISOU	1403	CG	PHE	201	6643	6596	4396	-2038	1879	-1497

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ATOM   1404 CD1 PHE  201 10.736  16.954  71.991 1.000 50.03
ANISOU 1404 CD1 PHE  201 7982    6634    4393    -2326 1092 -991
ATOM   1405 CD2 PHE  201 9.220   18.001  70.513 1.000 42.63
ANISOU 1405 CD2 PHE  201 5458    6427    4313    -1097 2449 -2268
ATOM   1406 CE1 PHE  201 10.434  15.739  71.417 1.000 49.95
ANISOU 1406 CE1 PHE  201 8275    6464    4240    -2047 227  -716
ATOM   1407 CE2 PHE  201 8.901   16.783  69.934 1.000 41.38
ANISOU 1407 CE2 PHE  201 6016    5946    3762    -578  2006 -1844
ATOM   1408 CZ  PHE  201 9.515   15.636  70.392 1.000 44.74
ANISOU 1408 CZ  PHE  201 7075    6261    3663    -1063 1020 -975
ATOM   1409 C   PHE  201 11.722  20.110  70.107 1.000 42.42
ANISOU 1409 C   PHE  201 6324    6442    3351    -1964 717  -1441
ATOM   1410 O   PHE  201 11.007  20.941  69.536 1.000 47.79
ANISOU 1410 O   PHE  201 9668    4400    4090    -762  691  -2416
ATOM   1411 N   VAL  202 12.477  19.232  69.449 1.000 34.04
ANISOU 1411 N   VAL  202 4525    5852    2558    -1948 7  -425
ATOM   1412 CA  VAL  202 12.535  19.245  67.993 1.000 25.09
ANISOU 1412 CA  VAL  202 3221    3752    2558    -1041 -182 9  9
ATOM   1413 CB  VAL  202 13.988  19.286  67.489 1.000 22.88
ANISOU 1413 CB  VAL  202 2832    3430    2432    -577  -691 -198
ATOM   1414 CG1 VAL  202 14.053  19.387  65.965 1.000 26.02
ANISOU 1414 CG1 VAL  202 3821    3594    2470    -958  35  -277
ATOM   1415 CG2 VAL  202 14.771  20.443  68.078 1.000 24.69
ANISOU 1415 CG2 VAL  202 3043    3473    2867    -786  -410 -320
ATOM   1416 C   VAL  202 11.798  18.035  67.421 1.000 20.69
ANISOU 1416 C   VAL  202 3027    2810    2023    -648  58 615
ATOM   1417 O   VAL  202 12.288  16.914  67.581 1.000 26.08
ANISOU 1417 O   VAL  202 3294    3219    3396    -136  452  884
ATOM   1418 N   SER  203 10.662  18.234  66.766 1.000 20.21
ANISOU 1418 N   SER  203 3100    2794    1787    -414  25  -152
ATOM   1419 CA  SER  203 9.820   17.192  66.218 1.000 20.37
ANISOU 1419 CA  SER  203 3149    2709    1884    -355  129  -256
ATOM   1420 CB  SER  203 8.437   17.779  65.896 1.000 24.72
ANISOU 1420 CB  SER  203 2726    4106    2558    -178  369  -1015
ATOM   1421 OG  SER  203 7.841   18.239  67.097 1.000 31.80
ANISOU 1421 OG  SER  203 3328    5782    2974    -457  1175 -1104
ATOM   1422 C   SER  203 10.367  16.524  64.958 1.000 19.13
ANISOU 1422 C   SER  203 2580    2647    2040    -339  170  -244
ATOM   1423 O   SER  203 10.279  15.302  64.832 1.000 17.01
ANISOU 1423 O   SER  203 2311    2625    1527    -414  206  -18
ATOM   1424 N   LEU  204 10.902  17.259  63.998 1.000 16.16
ANISOU 1424 N   LEU  204 2142    1976    2024    71 77  -292
ATOM   1425 CA  LEU  204 11.403  16.679  62.740 1.000 14.07
ANISOU 1425 CA  LEU  204 1670    1626    2049    -22   -24  -283
ATOM   1426 CB  LEU  204 11.269  17.704  61.618 1.000 13.80
ANISOU 1426 CB  LEU  204 1549    1763    1931    -249  -340 -277
ATOM   1427 CG  LEU  204 11.647  17.272  60.212 1.000 14.13
ANISOU 1427 CG  LEU  204 1726    1722    1919    -253  -482 -412
ATOM   1428 CD1 LEU  204 10.770  16.134  59.680 1.000 18.76
ANISOU 1428 CD1 LEU  204 2579    2895    1654    -1297 -927 -106
ATOM   1429 CD2 LEU  204 11.609  18.478  59.255 1.000 16.20
ANISOU 1429 CD2 LEU  204 1987    2095    2074    65 75  -123
ATOM   1430 C   LEU  204 12.832  16.140  62.885 1.000 14.81
ANISOU 1430 C   LEU  204 1734    1748    2144    9  -199  -250
ATOM   1431 O   LEU  204 13.699  16.853  63.397 1.000 15.52
ANISOU 1431 O   LEU  204 1833    1789    2274    -59   -435 -42
ATOM   1432 N   GLN  205 13.065  14.900  62.469 1.000 14.42
ANISOU 1432 N   GLN  205 1847    1804    1827    189   -120 -153
ATOM   1433 CA  GLN  205 14.288  14.143  62.574 1.000 12.76
ANISOU 1433 CA  GLN  205 1777    1655    1419    43 -347  -113
ATOM   1434 C   GLN  205 14.622  13.434  61.260 1.000 11.12
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ANISOU 1434  C   GLN  205  1412   1474   1338    49  -468   -21
ATOM   1435  O   GLN  205  13.707  12.927  60.606  1.000 13.97
ANISOU 1435  O   GLN  205  1622   2235   1449   -293  -449  -147
ATOM   1436  CB  GLN  205  14.164  13.062  63.662  1.000 15.57
ANISOU 1436  CB  GLN  205  2421   1925   1568   341   151   83
ATOM   1437  CG  GLN  205  13.863  13.635  65.032  1.000 18.58
ANISOU 1437  CG  GLN  205  3321   2286   1451   689  -1298   2
ATOM   1438  CD  GLN  205  15.086  14.243  65.680  1.000 24.33
ANISOU 1438  CD  GLN  205  3687   3465   2091   520  -499  -570
ATOM   1439  OE1 GLN  205  16.206  13.717  65.549  1.000 29.12
ANISOU 1439  OE1 GLN  205  3350   3464   4251   14  -270  -1800
ATOM   1440  NE2 GLN  205  14.840  15.356  66.378  1.000 23.01
ANISOU 1440  NE2 GLN  205  3055   2465   3225   335  -592  -140
ATOM   1441  N   ALA  206  15.893  13.401  60.893  1.000 12.63
ANISOU 1441  N   ALA  206  1523   1770   1506  -251  -234   -6
ATOM   1442  CA  ALA  206  16.335  12.649  59.731  1.000 13.77
ANISOU 1442  CA  ALA  206  1392   2099   1742  -522  -72  -295
ATOM   1443  CB  ALA  206  16.693  13.519  58.528  1.000 16.34
ANISOU 1443  CB  ALA  206  2034   2494   1682  -603   123  -277
ATOM   1444  C   ALA  206  17.567  11.813  60.046  1.000 15.92
ANISOU 1444  C   ALA  206  1489   2331   2230  -290   179  -341
ATOM   1445  O   ALA  206  18.368  12.182  60.908  1.000 15.86
ANISOU 1445  O   ALA  206  1877   1772   2377   150  -356   30
ATOM   1446  N   GLU  207  17.707  10.712  59.305  1.000 16.98
ANISOU 1446  N   GLU  207  1981   2086   2383  -335   348  -186
ATOM   1447  CA  GLU  207  18.938  9.942  59.364  1.000 20.58
ANISOU 1447  CA  GLU  207  2198   1938   3684  -164   490  -10
ATOM   1448  C   GLU  207  20.082  10.688  58.681  1.000 18.75
ANISOU 1448  C   GLU  207  1828   2037   3260   272   185  5588
ATOM   1449  O   GLU  207  19.948  10.953  57.503  1.000 18.23
ANISOU 1449  O   GLU  207  1746   2145   3034   528  -45
ATOM   1450  CB  GLU  207  18.665  8.612  58.676  1.000 25.81
ANISOU 1450  CB  GLU  207  3289   1794   4724  -19   83  -135
ATOM   1451  CG  GLU  207  19.879  7.737  58.429  1.000 30.08
ANISOU 1451  CG  GLU  207  4102   2221   5105   907  -948  -546
ATOM   1452  CD  GLU  207  19.429  6.356  57.959  1.000 29.93
ANISOU 1452  CD  GLU  207  5549   2024   3798  1179 -2099  -123
ATOM   1453  OE1 GLU  207  19.491  5.471  58.839  1.000 35.14
ANISOU 1453  OE1 GLU  207  5782   2692   4879   938  -931  885
ATOM   1454  OE2 GLU  207  19.037  6.251  56.762  1.000 38.62
ANISOU 1454  OE2 GLU  207  4955   5608   4109   135  -2494  -366
ATOM   1455  N   VAL  208  21.146  10.997  59.414  1.000 16.97
ANISOU 1455  N   VAL  208  1926   1974   2549   120   337  807
ATOM   1456  CA  VAL  208  22.376  11.593  58.902  1.000 17.77
ANISOU 1456  CA  VAL  208  1894   2109   2748    93  500  411
ATOM   1457  CB  VAL  208  22.455  13.111  59.155  1.000 16.89
ANISOU 1457  CB  VAL  208  2774   2148   1494  -372  -149  569
ATOM   1458  CG1 VAL  208  23.652  13.688  58.409  1.000 20.76
ANISOU 1458  CG1 VAL  208  3214   2150   2526  -423   647  148
ATOM   1459  CG2 VAL  208  21.172  13.815  58.720  1.000 16.36
ANISOU 1459  CG2 VAL  208  3146   1640   1431   25   98  353
ATOM   1460  C   VAL  208  23.585  10.877  59.507  1.000 20.29
ANISOU 1460  C   VAL  208  1936   2555   3217   -11  -58  132
ATOM   1461  O   VAL  208  23.726  10.829  60.741  1.000 20.74
ANISOU 1461  O   VAL  208  2436   2256   3187   460   206  544
ATOM   1462  N   GLY  209  24.457  10.295  58.672  1.000 18.94
ANISOU 1462  N   GLY  209  1764   2445   2989   211  -494   15
ATOM   1463  CA  GLY  209  25.558  9.508  59.194  1.000 24.01
ANISOU 1463  CA  GLY  209  2171   3040   3910   549  -396  709
ATOM   1464  C   GLY  209  25.123  8.364  60.082  1.000 25.00
ANISOU 1464  C   GLY  209  2874   3156   3470  1406   772  649
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ATOM   1465 O   GLY 209 25.850  7.934  60.991 1.000 35.98
ANISOU 1465 O   GLY 209 4448   3946   5279   1425  -426 1769
ATOM   1466 N   GLY 210 23.951  7.786  59.869 1.000 25.89
ANISOU 1466 N   GLY 210 3802   2756   3278   523   899  749
ATOM   1467 CA  GLY 210 23.477  6.678  60.671 1.000 26.43
ANISOU 1467 CA  GLY 210 4479   2136   3427   1228  742  912
ATOM   1468 C   GLY 210 22.885  7.025  62.016 1.000 28.45
ANISOU 1468 C   GLY 210 5472   2099   3237   831   1029 1175
ATOM   1469 O   GLY 210 22.634  6.098  62.789 1.000 40.26
ANISOU 1469 O   GLY 210 7322   2719   5256   1881  2759 2360
ATOM   1470 N   ALA 211 22.651  8.281  62.338 1.000 25.78
ANISOU 1470 N   ALA 211 4671   2359   2763   1370  724  1197
ATOM   1471 CA  ALA 211 22.048  8.671  63.613 1.000 23.74
ANISOU 1471 CA  ALA 211 2966   3156   2896   727   339  663
ATOM   1472 CB  ALA 211 23.093  9.333  64.496 1.000 29.57
ANISOU 1472 CB  ALA 211 2957   4372   3906   834   -96  69
ATOM   1473 C   ALA 211 20.900  9.626  63.360 1.000 21.19
ANISOU 1473 C   ALA 211 3090   2611   2350   484   178  741
ATOM   1474 O   ALA 211 20.936  10.381 62.399 1.000 23.91
ANISOU 1474 O   ALA 211 3771   2659   2653   -30   -66  930
ATOM   1475 N   PHE 212 19.889  9.629  64.204 1.000 19.88
ANISOU 1475 N   PHE 212 2603   2577   2375   398   -128 374
ATOM   1476 CA  PHE 212 18.814  10.613 64.130 1.000 19.13
ANISOU 1476 CA  PHE 212 2581   2257   2432   284   -565 317
ATOM   1477 C   PHE 212 19.320  12.006 64.489 1.000 20.00
ANISOU 1477 C   PHE 212 3004   2480   2115   133   -640 6 8
ATOM   1478 O   PHE 212 19.893  12.230 65.569 1.000 21.10
ANISOU 1478 O   PHE 212 2497   3558   1964   -391  -406 222
ATOM   1479 CB  PHE 212 17.688  10.290 65.096 1.000 21.37
ANISOU 1479 CB  PHE 212 2553   2616   2952   293   -197 -184
ATOM   1480 CG  PHE 212 17.010  8.950  64.912 1.000 23.45
ANISOU 1480 CG  PHE 212 2161   3496   3253   -376  -282 -558
ATOM   1481 CD1 PHE 212 16.369  8.377  65.990 1.000 23.33
ANISOU 1481 CD1 PHE 212 2545   3115   3206   -382  -350 -508
ATOM   1482 CD2 PHE 212 17.029  8.302  63.687 1.000 25.83
ANISOU 1482 CD2 PHE 212 2554   3962   3299   -622  -217 -787
ATOM   1483 CE1 PHE 212 15.730  7.149  65.872 1.000 28.13
ANISOU 1483 CE1 PHE 212 3784   3544   3362   -1119 96 -973
ATOM   1484 CE2 PHE 212 16.419  7.072  63.569 1.000 23.04
ANISOU 1484 CE2 PHE 212 2504   2960   3289   382   -232 -558
ATOM   1485 CZ  PHE 212 15.781  6.486  64.651 1.000 27.88
ANISOU 1485 CZ  PHE 212 3658   3977   2957   -1072 -501 -760
ATOM   1486 N   THR 213 19.076  12.936 63.578 1.000 18.30
ANISOU 1486 N   THR 213 2690   2083   2181   149   -583 -93
ATOM   1487 CA  THR 213 19.566  14.310 63.681 1.000 17.99
ANISOU 1487 CA  THR 213 1976   2139   2721   230   -686 -287
ATOM   1488 CB  THR 213 20.515  14.586 62.498 1.000 20.43
ANISOU 1488 CB  THR 213 1798   2280   3683   140   -119 -423
ATOM   1489 OG1 THR 213 21.638  13.695 62.629 1.000 25.33
ANISOU 1489 OG1 THR 213 2571   3378   3676   925   715 28
ATOM   1490 CG2 THR 213 21.087  15.985 62.485 1.000 21.11
ANISOU 1490 CG2 THR 213 1935   2667   3420   -310  -289 -747
ATOM   1491 C   THR 213 18.391  15.277 63.641 1.000 15.53
ANISOU 1491 C   THR 213 1732   2135   2032   111   -557 -167
ATOM   1492 O   THR 213 17.533  15.195 62.761 1.000 16.11
ANISOU 1492 O   THR 213 1742   2197   2180   -327  -669 5 6
ATOM   1493 N   ASP 214 18.362  16.199 64.590 1.000 15.60
ANISOU 1493 N   ASP 214 2025   2046   1857   64 -405  2
ATOM   1494 CA  ASP 214 17.380  17.256 64.672 1.000 15.59
ANISOU 1494 CA  ASP 214 2130   1722   2072   2  -1010 -242
ATOM   1495 CB  ASP 214 17.744  18.200 65.822 1.000 17.13
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ANISOU	1495	CB	ASP	214	2528	1893	2086	-226	-1022	-247
ATOM	1496	CG	ASP	214	17.612	17.672	67.219	1.000	20.21	
ANISOU	1496	CG	ASP	214	3138	2495	2045	-451	-1276	-148
ATOM	1497	OD1	ASP	214	17.079	16.571	67.460	1.000	20.87	
ANISOU	1497	OD1	ASP	214	2778	2632	2518	-247	-505	151
ATOM	1498	OD2	ASP	214	18.076	18.401	68.127	1.000	28.05	
ANISOU	1498	OD2	ASP	214	5110	3118	2429	-257	-1997	-619
ATOM	1499	C	ASP	214	17.314	18.146	63.441	1.000	15.14	
ANISOU	1499	C	ASP	214	2029	1822	1901	182	-574	-319
ATOM	1500	O	ASP	214	18.349	18.552	62.897	1.000	17.63	
ANISOU	1500	O	ASP	214	1956	2032	2710	-214	-810	-15
ATOM	1501	N	LEU	215	16.105	18.493	63.027	1.000	14.69	
ANISOU	1501	N	LEU	215	1936	1758	1887	38	-334	242
ATOM	1502	CA	LEU	215	15.915	19.504	61.979	1.000	13.35	
ANISOU	1502	CA	LEU	215	1820	1753	1498	89	-22	5 9
ATOM	1503	CB	LEU	215	15.352	18.819	60.734	1.000	14.24	
ANISOU	1503	CB	LEU	215	1735	2167	1506	-98	75	- 3
ATOM	1504	CG	LEU	215	16.291	17.813	60.056	1.000	16.39	
ANISOU	1504	CG	LEU	215	2031	2285	1911	-340	320	-424
ATOM	1505	CD1	LEU	215	15.517	16.999	59.031	1.000	22.61	
ANISOU	1505	CD1	LEU	215	3139	2024	3427	-10	-801	-877
ATOM	1506	CD2	LEU	215	17.482	18.543	59.434	1.000	26.93	
ANISOU	1506	CD2	LEU	215	1998	5409	2827	-1083	909	-542
ATOM	1507	C	LEU	215	15.002	20.622	62.500	1.000	14.65	
ANISOU	1507	C	LEU	215	1770	1607	2190	86	-165	- 95
ATOM	1508	O	LEU	215	13.822	20.662	62.151	1.000	19.45	
ANISOU	1508	O	LEU	215	1748	2165	3476	116	-303	-203
ATOM	1509	N	PRO	216	15.552	21.523	63.314	1.000	15.99	
ANISOU	1509	N	PRO	216	2390	1970	1715	-164	21	-175
ATOM	1510	CD	PRO	216	16.955	21.601	63.757	1.000	19.37	
ANISOU	1510	CD	PRO	216	2900	2306	2155	-83	-790	-548
ATOM	1511	CA	PRO	216	14.760	22.620	63.846	1.000	18.68	
ANISOU	1511	CA	PRO	216	3104	2017	1976	12	-74	-420
ATOM	1512	CB	PRO	216	15.649	23.227	64.949	1.000	18.63	
ANISOU	1512	CB	PRO	216	3592	1517	1971	-120	-421	9
ATOM	1513	CG	PRO	216	17.030	22.847	64.581	1.000	22.35	
ANISOU	1513	CG	PRO	216	3401	2426	2666	-419	-427	-783
ATOM	1514	C	PRO	216	14.461	23.700	62.819	1.000	18.50	
ANISOU	1514	C	PRO	216	2921	2083	2026	58	-465	- 473
ATOM	1515	O	PRO	216	15.024	23.854	61.731	1.000	19.82	
ANISOU	1515	O	PRO	216	2752	2453	2325	-32	-375	1 9
ATOM	1516	N	TYR	217	13.487	24.536	63.194	1.000	20.05	
ANISOU	1516	N	TYR	217	3213	1981	2422	90	-482	- 718
ATOM	1517	CA	TYR	217	13.178	25.662	62.308	1.000	22.97	
ANISOU	1517	CA	TYR	217	2849	2652	3227	211	-1467	-313
ATOM	1518	C	TYR	217	14.347	26.647	62.283	1.000	23.92	
ANISOU	1518	C	TYR	217	4139	2131	2819	-337	-1776	-165
ATOM	1519	O	TYR	217	15.149	26.726	63.213	1.000	30.46	
ANISOU	1519	O	TYR	217	4321	3440	3812	-1118	-2477	728
ATOM	1520	CB	TYR	217	11.891	26.314	62.768	1.000	32.68	
ANISOU	1520	CB	TYR	217	3958	3294	5164	1148	-874	-783
ATOM	1521	CG	TYR	217	12.064	27.462	63.718	1.000	44.77	
ANISOU	1521	CG	TYR	217	6829	4326	5854	895	38	-1870
ATOM	1522	CD1	TYR	217	11.853	28.763	63.285	1.000	54.26	
ANISOU	1522	CD1	TYR	217	10311	3688	6615	-323	132	-1945
ATOM	1523	CD2	TYR	217	12.428	27.243	65.043	1.000	57.77	
ANISOU	1523	CD2	TYR	217	10635	5155	6158	-1027	-1446	-1931
ATOM	1524	CE1	TYR	217	12.011	29.816	64.174	1.000	60.33	
ANISOU	1524	CE1	TYR	217	11807	4345	6772	-1101	-132	-2259
ATOM	1525	CE2	TYR	217	12.585	28.296	65.926	1.000	64.51	
ANISOU	1525	CE2	TYR	217	12481	5199	6832	-1936	-1520	-2074

ATOM	1526	CZ	TYR	217	12.378	29.586	65.481	1.000	64.11		
ANISOU	1526	CZ	TYR	217	12047	5183	7129	-1460	-817	-2160	
ATOM	1527	OH	TYR	217	12.536	30.639	66.358	1.000	63.69		
ANISOU	1527	OH	TYR	217	11840	5206	7153	-1832	-1191	-2064	
ATOM	1528	N	ARG	218	14.418	27.374	61.188	1.000	24.08		
ANISOU	1528	N	ARG	218	4482	1611	3055	507	-1471	-145	
ATOM	1529	CA	ARG	218	15.335	28.465	60.948	1.000	30.71		
ANISOU	1529	CA	ARG	218	5932	2490	3245	-504	-1565	382	
ATOM	1530	CB	ARG	218	16.326	28.135	59.840	1.000	35.08		
ANISOU	1530	CB	ARG	218	5969	2797	4562	-1397	-779	-348	
ATOM	1531	CG	ARG	218	17.401	27.114	60.073	1.000	35.77		
ANISOU	1531	CG	ARG	218	6009	3087	4497	-1107	-733	-773	
ATOM	1532	CD	ARG	218	18.658	27.775	60.626	1.000	34.46		
ANISOU	1532	CD	ARG	218	5680	3264	4152	-1242	-244	-619	
ATOM	1533	NE	ARG	218	19.223	28.746	59.709	1.000	29.51		
ANISOU	1533	NE	ARG	218	4707	2579	3926	78	81	-629	
ATOM	1534	CZ	ARG	218	20.218	28.620	58.830	1.000	33.18		
ANISOU	1534	CZ	ARG	218	5269	3166	4170	60	452	-1075	
ATOM	1535	NH1	ARG	218	20.839	27.452	58.709	1.000	27.44		
ANISOU	1535	NH1	ARG	218	4202	2881	3341	-503	-373	-1585	
ATOM	1536	NH2	ARG	218	20.583	29.675	58.077	1.000	22.96		
ANISOU	1536	NH2	ARG	218	2327	3579	2817	233	-1117	-872	
ATOM	1537	C	ARG	218	14.513	29.655	60.464	1.000	31.05		
ANISOU	1537	C	ARG	218	7353	1949	2496	-448	-1823	197	
ATOM	1538	O	ARG	218	14.114	29.533	59.295	1.000	40.40		
ANISOU	1538	O	ARG	218	9873	2241	3235	531	-3168	-627	
ATOM	1539	N	PRO	219	14.246	30.747	61.157	1.000	30.01		
ANISOU	1539	N	PRO	219	6290	2559	2555	-499	-1839	-284	
ATOM	1540	CD	PRO	219	14.597	31.043	62.543	1.000	36.79		
ANISOU	1540	CD	PRO	219	8147	2878	2954	-1848	-2548	-374	
ATOM	1541	CA	PRO	219	13.464	31.841	60.549	1.000	26.34		
ANISOU	1541	CA	PRO	219	4421	2564	3025	-573	-988	-340	
ATOM	1542	CB	PRO	219	13.523	32.993	61.563	1.000	32.44		
ANISOU	1542	CB	PRO	219	5361	2891	4073	-691	-417	-989	
ATOM	1543	CG	PRO	219	13.947	32.372	62.825	1.000	38.75		
ANISOU	1543	CG	PRO	219	7916	3462	3344	-1981	-958	-1235	
ATOM	1544	C	PRO	219	14.005	32.329	59.220	1.000	23.64		
ANISOU	1544	C	PRO	219	3472	2066	3443	-161	-1028	109	
ATOM	1545	O	PRO	219	13.300	32.950	58.412	1.000	30.61		
ANISOU	1545	O	PRO	219	4358	2934	4339	-347	-1712	876	
ATOM	1546	N	ASP	220	15.269	32.087	58.906	1.000	25.98		
ANISOU	1546	N	ASP	220	3611	1756	4506	-389	-644	-815	
ATOM	1547	CA	ASP	220	15.847	32.660	57.705	1.000	27.96		
ANISOU	1547	CA	ASP	220	3951	1603	5071	-364	30	-824	
ATOM	1548	CB	ASP	220	17.212	33.238	58.155	1.000	29.61		
ANISOU	1548	CB	ASP	220	3549	3142	4558	-176	-326	176	
ATOM	1549	CG	ASP	220	18.091	32.158	58.780	1.000	32.09		
ANISOU	1549	CG	ASP	220	3706	3527	4961	625	978	615	
ATOM	1550	OD1	ASP	220	17.697	31.434	59.719	1.000	26.12		
ANISOU	1550	OD1	ASP	220	3013	3522	3390	-158	-289	-97	
ATOM	1551	OD2	ASP	220	19.241	32.088	58.281	1.000	29.09		
ANISOU	1551	OD2	ASP	220	3714	3756	3581	304	677	-712	
ATOM	1552	C	ASP	220	16.037	31.726	56.525	1.000	25.26		
ANISOU	1552	C	ASP	220	2508	1291	5800	354	1110	-822	
ATOM	1553	O	ASP	220	16.641	32.095	55.515	1.000	28.28		
ANISOU	1553	O	ASP	220	4088	1665	4994	-855	298	-434	
ATOM	1554	N	ALA	221	15.500	30.510	56.631	1.000	21.58		
ANISOU	1554	N	ALA	221	2748	1770	3681	-288	178	-651	
ATOM	1555	CA	ALA	221	15.840	29.484	55.658	1.000	19.81		
ANISOU	1555	CA	ALA	221	2986	1452	3090	-342	-224	-315	
ATOM	1556	CB	ALA	221	17.130	28.800	56.109	1.000	19.51		

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ANISOU 1556  CB  ALA  221 2267    1497    3647    -648  45 -746
ATOM   1557  C   ALA  221 14.718  28.469  55.489  1.000 17.71
ANISOU 1557  C   ALA  221 2304    1912    2512    -251  -75 -309
ATOM   1558  O   ALA  221 13.866  28.356  56.380  1.000 20.97
ANISOU 1558  O   ALA  221 3596    2029    2344    -503  406 -284
ATOM   1559  N   VAL  222 14.728  27.756  54.378  1.000 14.22
ANISOU 1559  N   VAL  222 1560    1582    2262    -76   -92  -11
ATOM   1560  CA  VAL  222 13.823  26.617  54.160  1.000 14.89
ANISOU 1560  CA  VAL  222 1326    1608    2723    98 -216  -205
ATOM   1561  CB  VAL  222 13.079  26.779  52.830  1.000 17.28
ANISOU 1561  CB  VAL  222 1680    1754    3133    90 -657  -144
ATOM   1562  CG1 VAL  222 13.995  26.685  51.620  1.000 19.17
ANISOU 1562  CG1 VAL  222 1974    2625    2686    -446  -775 150
ATOM   1563  CG2 VAL  222 11.996  25.747  52.641  1.000 17.36
ANISOU 1563  CG2 VAL  222 2185    1879    2533    -254  -362 -385
ATOM   1564  C   VAL  222 14.653  25.339  54.263  1.000 12.66
ANISOU 1564  C   VAL  222 1136    1564    2112    -50   -225 -378
ATOM   1565  O   VAL  222 15.828  25.320  53.893  1.000 13.12
ANISOU 1565  O   VAL  222 1280    1825    1881    104   -13  -199
ATOM   1566  N   LEU  223 14.049  24.267  54.775  1.000 12.98
ANISOU 1566  N   LEU  223 1123    1538    2270    -163  -370 -417
ATOM   1567  CA  LEU  223 14.681  22.952  54.749  1.000 10.70
ANISOU 1567  CA  LEU  223 891 1704     1472    -26   -98  -7
ATOM   1568  CB  LEU  223 14.276  22.130  55.961  1.000 13.02
ANISOU 1568  CB  LEU  223 1387    1968    1593    -419  289  -108
ATOM   1569  CG  LEU  223 14.739  20.683  56.106  1.000 17.41
ANISOU 1569  CG  LEU  223 2434    2132    2050    -290  -476 566
ATOM   1570  CD1 LEU  223 16.247  20.614  56.204  1.000 17.20
ANISOU 1570  CD1 LEU  223 2576    1518    2441    26 -989  -249
ATOM   1571  CD2 LEU  223 13.983  20.076  57.282  1.000 33.63
ANISOU 1571  CD2 LEU  223 3981    4721    4077    -341  134  2949
ATOM   1572  C   LEU  223 14.362  22.211  53.456  1.000 10.02
ANISOU 1572  C   LEU  223 1000    1265    1543    58 -319  8 8
ATOM   1573  O   LEU  223 13.206  22.160  53.088  1.000 12.86
ANISOU 1573  O   LEU  223 949 1945     1992    -97   -174  -372
ATOM   1574  N   VAL  224 15.406  21.675  52.798  1.000 10.55
ANISOU 1574  N   VAL  224 978 1070     1962    -76   -418  -382
ATOM   1575  CA  VAL  224 15.227  20.932  51.553  1.000 11.98
ANISOU 1575  CA  VAL  224 1376    1288    1887    -249  -278 -372
ATOM   1576  CB  VAL  224 16.095  21.461  50.391  1.000 11.23
ANISOU 1576  CB  VAL  224 901 1541     1824    -279  -622  -99
ATOM   1577  CG1 VAL  224 15.833  20.690  49.102  1.000 13.16
ANISOU 1577  CG1 VAL  224 1899    1485    1615    -462  -516 8 4
ATOM   1578  CG2 VAL  224 15.837  22.941  50.156  1.000 13.86
ANISOU 1578  CG2 VAL  224 1480    1520    2266    -135  -354 -64
ATOM   1579  C   VAL  224 15.539  19.450  51.786  1.000 10.87
ANISOU 1579  C   VAL  224 953 1275     1901    -13   342 -484
ATOM   1580  O   VAL  224 16.646  19.148  52.201  1.000 12.57
ANISOU 1580  O   VAL  224 1283    1363    2132    -175  -154 -274
ATOM   1581  N   PHE  225 14.585  18.553  51.533  1.000 11.86
ANISOU 1581  N   PHE  225 1241    1128    2137    -15   -303 -61
ATOM   1582  CA  PHE  225 14.811  17.130  51.412  1.000 11.38
ANISOU 1582  CA  PHE  225 1260    1157    1909    -22   -67  -56
ATOM   1583  CB  PHE  225 13.707  16.280  52.044  1.000 11.34
ANISOU 1583  CB  PHE  225 1117    1176    2015    205   -213 335
ATOM   1584  CG  PHE  225 13.654  16.172  53.544  1.000 11.38
ANISOU 1584  CG  PHE  225 964 1369     1991    -251  -333  181
ATOM   1585  CD1 PHE  225 14.685  15.653  54.291  1.000 15.28
ANISOU 1585  CD1 PHE  225 1771    1777    2256    -98   -853 298
ATOM   1586  CD2 PHE  225 12.532  16.576  54.254  1.000 17.91
ANISOU 1586  CD2 PHE  225 1904    2748    2153    341   106  0
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ATOM   1587 CE1 PHE  225 14.619  15.535  55.661 1.000 17.46
ANISOU 1587 CE1 PHE  225 2449    1862    2321    -249  -795 6 6 6
ATOM   1588 CE2 PHE  225 12.447  16.474  55.612 1.000 19.35
ANISOU 1588 CE2 PHE  225 2563    2678    2111    121   129  - 1 1
ATOM   1589 CZ  PHE  225 13.499  15.945  56.341 1.000 18.20
ANISOU 1589 CZ  PHE  225 2952    1641    2324    -501  -470 3  6
ATOM   1590 C   PHE  225 14.907  16.774  49.927 1.000 12.03
ANISOU 1590 C   PHE  225 1480    1285    1804    130   -201 4  2
ATOM   1591 O   PHE  225 14.019  17.160  49.163 1.000 12.77
ANISOU 1591 O   PHE  225 1473    1466    1912    341   -118 3  8
ATOM   1592 N   CYS  226 15.940  16.032  49.521 1.000 9.62
ANISOU 1592 N   CYS  226 954 1403     1296    -204  -407  2 9
ATOM   1593 CA  CYS  226 15.917  15.400  48.197 1.000 10.80
ANISOU 1593 CA  CYS  226 1432    1204    1468    -258  -310 - 5 9
ATOM   1594 CB  CYS  226 17.337  15.029  47.744 1.000 12.02
ANISOU 1594 CB  CYS  226 1539    1362    1666    -357  16 -1 2 5
ATOM   1595 SG  CYS  226 18.426  16.4' 0  47.554 1.000 13.74
ANISOU 1595 SG  CYS  226 1627    1400    2192    -341  18 1 3 9
ATOM   1596 C   CYS  226 14.998  14.178  48.256 1.000 9.86
ANISOU 1596 C   CYS  226 1190    1061    1495    -20   -293 - 1 6
ATOM   1597 O   CYS  226 15.015  13.431  49.252 1.000 11.17
ANISOU 1597 O   CYS  226 1181    1280    1781    -129  -435 2 7 2
ATOM   1598 N   GLY  227 14.217  13.963  47.205 1.000 10.17
ANISOU 1598 N   GLY  227 1428    1010    1427    -258  -271 - 3 5
ATOM   1599 CA  GLY  227 13.370  12.806  47.053 1.000 9.73
ANISOU 1599 CA  GLY  227 1231    860  1604    -178  -74 - 3 7
ATOM   1600 C   GLY  227 13.908  11.769  46.074 1.000 9.48
ANISOU 1600 C   GLY  227 1438    717  1445    16 -35   1 6 9
ATOM   1601 O   GLY  227 14.935  11.961  45.402 1.000 9.86
ANISOU 1601 O   GLY  227 1321    1137    1290    -104  -179 7  8
ATOM   1602 N   ALA  228 13.217  10.631  45.971 1.000 9.17
ANISOU 1602 N   ALA  228 1279    729  1477    109   -135  5  8
ATOM   1603 CA  ALA  228 13.650  9.529   45.108 1.000 9.41
ANISOU 1603 CA  ALA  228 1315    887  1371    9   -74   - 5 2
ATOM   1604 CB  ALA  228 12.727  8.296   45.256 1.000 10.50
ANISOU 1604 CB  ALA  228 2011    824  1155    -143  124 1 0 1
ATOM   1605 C   ALA  228 13.712  9.918   43.637 1.000 9.25
ANISOU 1605 C   ALA  228 1343    666  1507    -108  90 1 3 9
ATOM   1606 O   ALA  228 14.493  9.305   42.895 1.000 9.48
ANISOU 1606 O   ALA  228 1171    1026    1405    -88   -50  9  0
ATOM   1607 N   ILE  229 12.970  10.907  43.143 1.000 10.30
ANISOU 1607 N   ILE  229 1402    1004    1509    18 25 1 7 7
ATOM   1608 CA  ILE  229 13.074  11.311  41.727 1.000 10.87
ANISOU 1608 CA  ILE  229 1197    1446    1487    -2 -159  2 5 1
ATOM   1609 CB  ILE  229 11.802  12.078  41.295 1.000 11.52
ANISOU 1609 CB  ILE  229 1257    1473    1647    34 -57 3 6 2
ATOM   1610 CG2 ILE  229 11.997  12.852  39.999 1.000 11.30
ANISOU 1610 CG2 ILE  229 1655    1211    1426    83 -189  1 5 6
ATOM   1611 CG1 ILE  229 10.575  11.131  41.237 1.000 14.39
ANISOU 1611 CG1 ILE  229 1031    2034    2402    -40   210  3 1 1
ATOM   1612 CD1 ILE  229 10.676  10.093  40.138 1.000 19.20
ANISOU 1612 CD1 ILE  229 2085    1723    3489    -610  93 - 1 3 8
ATOM   1613 C   ILE  229 14.389  12.034  41.477 1.000 10.38
ANISOU 1613 C   ILE  229 1293    1405    1247    -62   -169 3 2 2
ATOM   1614 O   ILE  229 14.952  11.947  40.369 1.000 11.66
ANISOU 1614 O   ILE  229 1805    1257    1368    -13   145  3 2 8
ATOM   1615 N   ALA  230 14.965  12.692  42.490 1.000 10.66
ANISOU 1615 N   ALA  230 1476    1274    1300    -104  -151 3 5 6
ATOM   1616 CA  ALA  230 16.312  13.259  42.338 1.000 11.21
ANISOU 1616 CA  ALA  230 1473    975  1813    -57   -308  9  0
ATOM   1617 CB  ALA  230 16.681  14.148  43.509 1.000 10.58
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ANISOU 1617 CB  ALA  230 1350    1295    1375    62 -106  1 2 6
ATOM   1618 C   ALA  230 17.336  12.136  42.132 1.000 11.28
ANISOU 1618 C   ALA  230 1640    1037    1610    1  55 2 4 2
ATOM   1619 O   ALA  230 18.220  12.185  41.273 1.000 11.29
ANISOU 1619 O   ALA  230 1510    1240    1539    -189  -40  2 8 8
ATOM   1620 N   THR  231 17.173  11.097  42.946 1.000 10.55
ANISOU 1620 N   THR  231 1328    894  1787    -262  -70 2 1 4
ATOM   1621 CA  THR  231 18.064  9.939   42.819 1.000 11.98
ANISOU 1621 CA  THR  231 1929    1018    1605    0  -164  1 5 9
ATOM   1622 CB  THR  231 17.717  8.865   43.878 1.000 10.76
ANISOU 1622 CB  THR  231 1381    1070    1636    -86   -453 2 4 6
ATOM   1623 OG1 THR  231 17.658  9.437   45.198 1.000 11.82
ANISOU 1623 OG1 THR  231 1615    1236    1641    35 -115  2 7 7
ATOM   1624 CG2 THR  231 18.765  7.752   43.880 1.000 12.57
ANISOU 1624 CG2 THR  231 1621    1314    1840    160   -89  3 5 1
ATOM   1625 C   THR  231 17.958  9.352   41.415 1.000 12.52
ANISOU 1625 C   THR  231 1632    1500    1624    -145  42 1 1
ATOM   1626 O   THR  231 18.939  9.050   40.732 1.000 12.15
ANISOU 1626 O   THR  231 1636    1233    1747    -17   86 2 2 4
ATOM   1627 N   LEU  232 16.717  9.154   40.959 1.000 11.14
ANISOU 1627 N   LEU  232 1608    1005    1620    90 -68 1 4 1
ATOM   1628 CA  LEU  232 16.446  8.522   39.675 1.000 12.47
ANISOU 1628 CA  LEU  232 1880    1203    1657    109   -169 4  5
ATOM   1629 CB  LEU  232 14.950  8.214   39.552 1.000 12.81
ANISOU 1629 CB  LEU  232 1989    1225    1654    -78   -209 1  9
ATOM   1630 CG  LEU  232 14.452  7.464   38.314 1.000 14.85
ANISOU 1630 CG  LEU  232 2171    1753    1719    -5 -410  - 9 6
ATOM   1631 CD1 LEU  232 15.020  6.055   38.240 1.000 16.78
ANISOU 1631 CD1 LEU  232 2693    1749    1932    72 -431  - 4 8 7
ATOM   1632 CD2 LEU  232 12.914  7.411   38.291 1.000 15.70
ANISOU 1632 CD2 LEU  232 2180    1866    1920    -278  -589 4 9 4
ATOM   1633 C   LEU  232 16.964  9.354   38.511 1.000 11.58
ANISOU 1633 C   LEU  232 1452    1390    1559    309   -301 1 3 6
ATOM   1634 O   LEU  232 17.752  8.837   37.686 1.000 13.45
ANISOU 1634 O   LEU  232 1808    1436    1867    320   -17  3  0
ATOM   1635 N   VAL  233 16.565  10.617  38.414 1.000 10.95
ANISOU 1635 N   VAL  233 1428    1210    1522    -14   -210 0
ATOM   1636 CA  VAL  233 16.948  11.421  37.242 1.000 11.70
ANISOU 1636 CA  VAL  233 1703    1345    1397    97 5  1 3
ATOM   1637 CB  VAL  233 16.156  12.743  37.215 1.000 11.14
ANISOU 1637 CB  VAL  233 1672    1272    1287    -26   276  7  3
ATOM   1638 CG1 VAL  233 16.661  13.774  38.249 1.000 13.34
ANISOU 1638 CG1 VAL  233 1834    1562    1673    -205  653  - 3 6 8
ATOM   1639 CG2 VAL  233 16.106  13.412  35.827 1.000 14.66
ANISOU 1639 CG2 VAL  233 1992    1873    1704    -4 -45 5 8 6
ATOM   1640 C   VAL  233 18.459  11.586  37.132 1.000 13.41
ANISOU 1640 C   VAL  233 1712    1573    1811    91 151 1 2 5
ATOM   1641 O   VAL  233 19.012  11.627  36.021 1.000 13.45
ANISOU 1641 O   VAL  233 1844    1402    1866    46 192 4 3 8
ATOM   1642 N   THR  234 19.188  11.665  38.250 1.000 13.13
ANISOU 1642 N   THR  234 1457    1639    1893    -139  223  1 2 6
ATOM   1643 CA  THR  234 20.613  11.930  38.244 1.000 13.00
ANISOU 1643 CA  THR  234 1483    1600    1855    -188  428  1 4 3
ATOM   1644 CB  THR  234 21.069  12.726  39.465 1.000 12.46
ANISOU 1644 CB  THR  234 1300    1632    1803    -32   200  2 5 1
ATOM   1645 OG1 THR  234 20.825  11.941  40.639 1.000 13.71
ANISOU 1645 OG1 THR  234 1660    1662    1888    192   202  2 9 1
ATOM   1646 CG2 THR  234 20.301  14.027  39.643 1.000 11.37
ANISOU 1646 CG2 THR  234 1097    1565    1657    -153  -87  1 6 9
ATOM   1647 C   THR  234 21.424  10.643  38.178 1.000 14.44
ANISOU 1647 C   THR  234 1550    1823    2114    6  -73 - 5 3
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ATOM   1648 O   THR 234 22.659 10.710 38.233 1.000 15.81
ANISOU 1648 O   THR 234 1546  2169  2293  61 27 2 1 7
ATOM   1649 N   GLY 235 20.767 9.477 38.070 1.000 14.76
ANISOU 1649 N   GLY 235 1776  1576  2254  77 81 4 1 0
ATOM   1650 CA  GLY 235 21.530 8.249 37.994 1.000 16.69
ANISOU 1650 CA  GLY 235 2053  1803  2486  304   35 1 8 9
ATOM   1651 C   GLY 235 22.243 7.862 39.275 1.000 16.83
ANISOU 1651 C   GLY 235 1854  2031  2512  765   244  1 9 3
ATOM   1652 O   GLY 235 23.305 7.237 39.194 1.000 19.67
ANISOU 1652 O   GLY 235 2074  2172  3225  1035  383  3 7 2
ATOM   1653 N   GLY 236 21.665 8.227 40.425 1.000 14.46
ANISOU 1653 N   GLY 236 1732  1327  2433  154   198  7  5
ATOM   1654 CA  GLY 236 22.187 7.768 41.692 1.000 15.73
ANISOU 1654 CA  GLY 236 2060  1381  2536  41 186 3 1 2
ATOM   1655 C   GLY 236 23.166 8.691 42.388 1.000 14.76
ANISOU 1655 C   GLY 236 1931  1332  2346  252   73 2 8 8
ATOM   1656 C   GLY 236 23.778 8.244 43.373 1.000 18.32
ANISOU 1656 O   GLY 236 1983  2197  2782  106   -105 8 4 4
ATOM   1657 N   GLN 237 23.318 9.938 41.953 1.000 13.99
ANISOU 1657 N   GLN 237 1831  1349  2137  158   165  1 7 0
ATOM   1658 CA  GLN 237 24.209 10.956 42.485 1.000 13.13
ANISOU 1658 CA  GLN 237 1474  1304  2210  367   -31  2 7 6
ATOM   1659 CB  GLN 237 24.629 11.948 41.383 1.000 13.38
ANISOU 1659 CB  GLN 237 1367  1566  2151  99 72 1 5 9
ATOM   1660 CG  GLN 237 25.390 11.335 40.219 1.000 14.74
ANISOU 1660 CG  GLN 237 1404  1529  2666  518   410  3 3 3
ATOM   1661 CD  GLN 237 25.816 12.428 39.257 1.000 17.22
ANISOU 1661 CD  GLN 237 2039  2018  2486  -64   426  3 6 0
ATOM   1662 OE1 GLN 237 26.754 13.208 39.522 1.000 20.60
ANISOU 1662 OE1 GLN 237 1566  2334  3928  -10   -29  9 6 5
ATOM   1663 NE2 GLN 237 25.116 12.470 38.127 1.000 17.47
ANISOU 1663 NE2 GLN 237 2014  2093  2533  208   438  4 0 8
ATOM   1664 C   GLN 237 23.627 11.739 43.663 1.000 12.90
ANISOU 1664 C   GLN 237 1474  1324  2104  72 -10 2 5 5
ATOM   1665 O   GLN 237 24.332 12.549 44.282 1.000 15.90
ANISOU 1665 O   GLN 237 1739  1888  2413  -291  74 - 8 4
ATOM   1666 N   VAL 238 22.365 11.481 44.013 1.000 12.13
ANISOU 1666 N   VAL 238 1372  962  2276  212   -33 2 0 0
ATOM   1667 CA  VAL 238 21.664 12.182 45.082 1.000 11.91
ANISOU 1667 CA  VAL 238 1169  1436  1920  -121  -276 - 1 9
ATOM   1668 CB  VAL 238 20.622 13.158 44.510 1.000 12.00
ANISOU 1668 CB  VAL 238 1024  1179  2357  -6 199 - 3 1
ATOM   1669 CG1 VAL 238 19.978 13.999 45.601 1.000 13.07
ANISOU 1669 CG1 VAL 238 1530  1668  1767  63 -232  - 2 2 2
ATOM   1670 CG2 VAL 238 21.207 14.088 43.463 1.000 14.00
ANISOU 1670 CG2 VAL 238 1795  1470  2053  -40   -2 1 8 1
ATOM   1671 C   VAL 238 20.990 11.156 46.000 1.000 13.62
ANISOU 1671 C   VAL 238 1707  1415  2054  -103  -40  - 2 2
ATOM   1672 O   VAL 238 20.252 10.288 45.492 1.000 12.64
ANISOU 1672 O   VAL 238 1702  977  2123  60 -318  2 5 7
ATOM   1673 N   LYS 239 21.247 11.246 47.300 1.000 11.99
ANISOU 1673 N   LYS 239 1075  1404  2076  127   -101 7  4
ATOM   1674 CA  LYS 239 20.568 10.444 48.322 1.000 12.77
ANISOU 1674 CA  LYS 239 1224  1541  2088  -12   -124 8  6
ATOM   1675 CB  LYS 239 21.382 10.463 49.622 1.000 12.23
ANISOU 1675 CB  LYS 239 1333  1155  2158  183   -234 - 2 8
ATOM   1676 CG  LYS 239 20.953 9.626 50.793 1.000 13.85
ANISOU 1676 CG  LYS 239 1643  1689  1931  187   -52  - 8 9
ATOM   1677 CD  LYS 239 21.927 9.579 51.957 1.000 20.13
ANISOU 1677 CD  LYS 239 2893  1795  2961  10 -1185 5 8 8
ATOM   1678 CE  LYS 239 21.364 8.745 53.098 1.000 24.73
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ANISOU	1678	CE	LYS	239	4065	2250	3080	-348	-1466	1064
ATOM	1679	NZ	LYS	239	22.019	8.841	54.420	1.000	32.28	
ANISOU	1679	NZ	LYS	239	5658	4315	2293	1610	-930	-304
ATOM	1680	C	LYS	239	19.169	10.949	48.661	1.000	11.59	
ANISOU	1680	C	LYS	239	1207	1332	1866	-35	-82	64
ATOM	1681	O	LYS	239	18.976	12.191	48.708	1.000	12.32	
ANISOU	1681	O	LYS	239	1638	1294	1749	-2	-25	236
ATOM	1682	N	ALA	240	18.222	10.047	48.863	1.000	10.65	
ANISOU	1682	N	ALA	240	1248	1266	1534	-52	-185	-88
ATOM	1683	CA	ALA	240	16.884	10.368	49.354	1.000	10.21	
ANISOU	1683	CA	ALA	240	1292	1057	1531	-195	-37	-109
ATOM	1684	CB	ALA	240	15.784	9.782	48.466	1.000	13.46	
ANISOU	1684	CB	ALA	240	1195	2378	1543	-232	20	-403
ATOM	1685	C	ALA	240	16.784	9.881	50.807	1.000	10.97	
ANISOU	1685	C	ALA	240	1308	1249	1611	-127	-142	49
ATOM	1686	O	ALA	240	16.595	8.664	51.059	1.000	13.02	
ANISOU	1686	O	ALA	240	2136	1242	1568	-243	28	-7
ATOM	1687	N	PRO	241	16.967	10.783	51.782	1.000	11.13	
ANISOU	1687	N	PRO	241	1723	1041	1466	160	-49	138
ATOM	1688	CD	PRO	241	17.172	12.237	51.654	1.000	11.17	
ANISOU	1688	CD	PRO	241	1419	1204	1618	-180	-128	76
ATOM	1689	CA	PRO	241	17.043	10.340	53.166	1.000	11.96	
ANISOU	1689	CA	PRO	241	1597	1447	1499	-172	-32	193
ATOM	1690	CB	PRO	241	17.712	11.545	53.891	1.000	14.25	
ANISOU	1690	CB	PRO	241	1875	1837	1701	-531	-383	242
ATOM	1691	CG	PRO	241	17.286	12.724	53.069	1.000	13.61	
ANISOU	1691	CG	PRO	241	2015	1446	1709	-596	-465	-22
ATOM	1692	C	PRO	241	15.708	10.072	53.861	1.000	12.35	
ANISOU	1692	C	PRO	241	1417	1610	1665	-175	-187	418
ATOM	1693	O	PRO	241	14.759	10.829	53.655	1.000	12.28	
ANISOU	1693	O	PRO	241	1359	1582	1723	-232	-468	81
ATOM	1694	N	ARG	242	15.700	9.033	54.711	1.000	12.75	
ANISOU	1694	N	ARG	242	1775	1407	1664	-170	76	250
ATOM	1695	CA	ARG	242	14.563	8.804	55.576	1.000	10.76	
ANISOU	1695	CA	ARG	242	1292	1417	1380	-207	-281	211
ATOM	1696	CB	ARG	242	14.614	7.405	56.223	1.000	15.02	
ANISOU	1696	CB	ARG	242	2419	1368	1918	-357	117	294
ATOM	1697	CG	ARG	242	14.115	6.342	55.230	1.000	17.85	
ANISOU	1697	CG	ARG	242	3373	1274	2135	9	-560	251
ATOM	1698	CD	ARG	242	14.254	4.934	55.763	1.000	19.42	
ANISOU	1698	CD	ARG	242	3148	1111	3120	506	503	116
ATOM	1699	NE	ARG	242	15.667	4.552	55.849	1.000	20.71	
ANISOU	1699	NE	ARG	242	3225	2107	2538	938	638	212
ATOM	1700	CZ	ARG	242	16.107	3.444	56.416	1.000	23.22	
ANISOU	1700	CZ	ARG	242	3198	2206	3417	307	-544	589
ATOM	1701	NH1	ARG	242	15.285	2.567	56.980	1.000	24.46	
ANISOU	1701	NH1	ARG	242	4097	2112	3083	307	387	195
ATOM	1702	NH2	ARG	242	17.416	3.184	56.438	1.000	25.41	
ANISOU	1702	NH2	ARG	242	3402	2332	3921	819	-267	403
ATOM	1703	C	ARG	242	14.477	9.834	56.704	1.000	11.95	
ANISOU	1703	C	ARG	242	1571	1463	1506	-248	-214	107
ATOM	1704	O	ARG	242	15.469	10.377	57.213	1.000	13.65	
ANISOU	1704	O	ARG	242	1708	1439	2040	-322	-401	-38
ATOM	1705	N	HIS	243	13.252	10.085	57.118	1.000	11.60	
ANISOU	1705	N	HIS	243	1657	1410	1342	-311	-206	5
ATOM	1706	CA	HIS	243	12.942	11.056	58.158	1.000	11.49	
ANISOU	1706	CA	HIS	243	1855	1571	938	-306	-183	140
ATOM	1707	CB	HIS	243	12.968	12.462	57.546	1.000	11.22	
ANISOU	1707	CB	HIS	243	1432	1379	1453	-231	-221	3 9
ATOM	1708	CG	HIS	243	12.133	12.694	56.341	1.000	11.80	
ANISOU	1708	CG	HIS	243	1937	1171	1378	-31	-268	7 9

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ATOM   1709 CD2 HIS  243 10.885 13.236 56.181 1.000 11.15
ANISOU 1709 CD2 HIS  243 1990   1106   1142    35 -344  1 4 1
ATOM   1710 ND1 HIS  243 12.538 12.345 55.086 1.000 12.29
ANISOU 1710 ND1 HIS  243 1670   1606   1395   -394  -91  8
ATOM   1711 CE1 HIS  243 11.599 12.653 54.209 1.000 12.59
ANISOU 1711 CE1 HIS  243 1686   1740   1357   -522 -202 -2 5 3
ATOM   1712 NE2 HIS  243 10.585 13.204 54.841 1.000 10.77
ANISOU 1712 NE2 HIS  243 1612   1307   1172   -616 -268 - 3 6
ATOM   1713 C   HIS  243 11.605 10.737 58.812 1.000 12.49
ANISOU 1713 C   HIS  243 1869   1570   1308   -321  -53  7 3
ATOM   1714 O   HIS  243 10.807 9.949  58.271 1.000 12.26
ANISOU 1714 O   HIS  243 1756   1404   1497   -188 -115 4  7
ATOM   1715 N   HIS  244 11.352 11.319 59.983 1.000 12.16
ANISOU 1715 N   HIS  244 1464   1715   1442   -230 -112 - 3 2
ATOM   1716 CA  HIS  244 10.138 11.043 60.758 1.000 12.02
ANISOU 1716 CA  HIS  244 1606   1809   1152   -599 -167 - 2 4
ATOM   1717 CB  HIS  244 10.255 9.778  61.615 1.000 12.51
ANISOU 1717 CB  HIS  244 1655   1763   1334    -19  101  - 4 7
ATOM   1718 CG  HIS  244 11.270 9.810  62.698 1.000 15.04
ANISOU 1718 CG  HIS  244 2025   1723   1965   -178 -433 1 5 4
ATOM   1719 CD2 HIS  244 11.276 10.380 63.923 1.000 18.19
ANISOU 1719 CD2 HIS  244 2946   2339   1627    36 -732  2 9 7
ATOM   1720 ND1 HIS  244 12.504 9.203  62.662 1.000 19.30
ANISOU 1720 ND1 HIS  244 2303   2232   2800    229  -708 2 6 6
ATOM   1721 CE1 HIS  244 13.226 9.387  63.731 1.000 22.48
ANISOU 1721 CE1 HIS  244 2649   2734   3159    11 -1206 6 5 0
ATOM   1722 NE2 HIS  244 12.476 10.120 64.531 1.000 22.33
ANISOU 1722 NE2 HIS  244 3088   2895   2500   -272 -1236 3 8 4
ATOM   1723 C   HIS  244 9.780  12.246 61.613 1.000 13.47
ANISOU 1723 C   HIS  244 1897   1673   1549   -362  254  6  7
ATOM   1724 O   HIS  244 10.603 13.165 61.798 1.000 13.48
ANISOU 1724 O   HIS  244 1800   1726   1595   -283  139  - 1 6 1
ATOM   1725 N   VAL  245 8.551  12.245 62.130 1.000 15.26
ANISOU 1725 N   VAL  245 1852   1964   1983   -417  232  - 5 5
ATOM   1726 CA  VAL  245 8.090  13.352 62.970 1.000 17.31
ANISOU 1726 CA  VAL  245 2108   2442   2026   -125  476  - 1 6 1
ATOM   1727 CB  VAL  245 6.939  14.169 62.360 1.000 17.33
ANISOU 1727 CB  VAL  245 2094   2473   2019    -80  340  - 4 7 7
ATOM   1728 CG1 VAL  245 6.551  15.334 63.286 1.000 25.25
ANISOU 1728 CG1 VAL  245 2217   2966   4410   -137 1939 - 1 2 4 8
ATOM   1729 CG2 VAL  245 7.252  14.713 60.966 1.000 21.49
ANISOU 1729 CG2 VAL  245 3070   2538   2556    -180  313  2 7 1
ATOM   1730 C   VAL  245 7.682  12.768 64.327 1.000 18.29
ANISOU 1730 C   VAL  245 2123   2689   2137   -443  508  - 7 1
ATOM   1731 O   VAL  245 6.765  11.945 64.429 1.000 18.62
ANISOU 1731 O   VAL  245 1810   2174   3089    -15  451  2 5 4
ATOM   1732 N   ALA  246 8.385  13.202 65.369 1.000 21.54
ANISOU 1732 N   ALA  246 2813   3045   2327   -591 -407 9 0 7
ATOM   1733 CA  ALA  246 8.133  12.701 66.719 1.000 25.10
ANISOU 1733 CA  ALA  246 4596   2562   2379    94 -225  9 9 7
ATOM   1734 CB  ALA  246 9.424  12.723 67.537 1.000 29.82
ANISOU 1734 CB  ALA  246 5381   3408   2540    402  -889 1 3 2 5
ATOM   1735 C   ALA  246 7.080  13.545 67.412 1.000 31.20
ANISOU 1735 C   ALA  246 5079   4143   2632    314  280  4 2 8
ATOM   1736 O   ALA  246 6.876  14.714 67.052 1.000 32.39
ANISOU 1736 O   ALA  246 4706   3748   3853    567  1247 - 6 6
ATOM   1737 N   ALA  247 6.429  12.973 68.413 1.000 37.30
ANISOU 1737 N   ALA  247 5548   5498   3126    92 640 8 3 5
ATOM   1738 CA  ALA  247 5.585  13.794 69.271 1.000 40.42
ANISOU 1738 CA  ALA  247 5434   6048   3878    15 1313  8 5 0
ATOM   1739 C   ALA  247 6.289  14.132 70.578 1.000 42.17
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ANISOU 1739  C   ALA 247  6495   5891   3636   -823  1720  3 4 1
ATOM   1740  O   ALA 247  7.048  13.338 71.136 1.000 41.63
ANISOU 1740  O   ALA 247  5811   6371   3637   -1631  804  4 2 5
ATOM   1741  CB  ALA 247  4.280  13.067 69.525 1.000 47.17
ANISOU 1741  CB  ALA 247  5186   9059   3676   -520  523  2 6 8 3
ATOM   1742  N   SER 257  1.781  21.848 70.382 1.000 31.02
ANISOU 1742  N   SER 257  4109   5558   2119   137   -235 -8 1 0
ATOM   1743  CA  SER 257  1.214  21.932 69.052 1.000 27.01
ANISOU 1743  CA  SER 257  2792   5165   2304   109   -143 -7 0 7
ATOM   1744  CB  SER 257  0.039  22.914 68.992 1.000 28.16
ANISOU 1744  CB  SER 257  2655   4473   3572   -238  -90  -1 0 7 1
ATOM   1745  OG  SER 257  0.491  24.251 69.074 1.000 51.32
ANISOU 1745  OG  SER 257  8516   4131   6853   -616  -2734 -8 0 7
ATOM   1746  C   SER 257  2.259  22.389 68.034 1.000 26.19
ANISOU 1746  C   SER 257  2537   5064   2350   -132  -413 -5 2 7
ATOM   1747  O   SER 257  3.286  22.988 68.352 1.000 31.47
ANISOU 1747  O   SER 257  2740   5886   3330   -435  -689 -6 3 9
ATOM   1748  N   ARG 258  2.022  22.123 66.763 1.000 26.04
ANISOU 1748  N   ARG 258  3257   4477   2161   -238  -441 -1 9
ATOM   1749  CA  ARG 258  2.982  22.541 65.747 1.000 25.81
ANISOU 1749  CA  ARG 258  2606   4735   2466   73 -338  -1 9 7
ATOM   1750  C   ARG 258  2.321  22.609 64.383 1.000 18.26
ANISOU 1750  C   ARG 258  2374   2541   2021   39 83 -8 5 4
ATOM   1751  O   ARG 258  1.288  21.967 64.131 1.000 19.23
ANISOU 1751  O   ARG 258  2600   2819   1888   -389  311  -4 2 0
ATOM   1752  CB  ARG 258  4.188  21.592 65.664 1.000 29.78
ANISOU 1752  CB  ARG 258  3403   5052   2861   695   -552 - 5 7
ATOM   1753  CG  ARG 258  4.246  20.784 64.384 1.000 32.64
ANISOU 1753  CG  ARG 258  4358   4148   3896   146   97 -5 6 1
ATOM   1754  CD  ARG 258  5.325  19.746 64.499 1.000 30.38
ANISOU 1754  CD  ARG 258  3812   4423   3309   -57   341  - 1 6
ATOM   1755  NE  ARG 258  6.433  19.909 63.581 1.000 29.43
ANISOU 1755  NE  ARG 258  3990   4604   2588   -22   70 5 4 2
ATOM   1756  CZ  ARG 258  6.453  19.389 62.359 1.000 25.02
ANISOU 1756  CZ  ARG 258  2540   3893   3074   304   -243 1 0 4
ATOM   1757  NH1 ARG 258  5.456  18.677 61.835 1.000 22.88
ANISOU 1757  NH1 ARG 258  2105   2607   3982   359   315  2 8 9
ATOM   1758  NH2 ARG 258  7.523  19.593 61.617 1.000 22.03
ANISOU 1758  NH2 ARG 258  2477   2775   3120   -430  -287 - 9 6 4
ATOM   1759  N   THR 259  2.927  23.415 63.527 1.000 20.17
ANISOU 1759  N   THR 259  2010   3640   2013   -743  91 -1 0 0 1
ATOM   1760  CA  THR 259  2.485  23.505 62.138 1.000 18.33
ANISOU 1760  CA  THR 259  1801   3043   2121   -533  43 - 6 8 5
ATOM   1761  CB  THR 259  1.821  24.821 61.713 1.000 23.23
ANISOU 1761  CB  THR 259  2082   3169   3576   -384  -164 - 5 8 0
ATOM   1762  OG1 THR 259  2.839  25.830 61.681 1.000 34.27
ANISOU 1762  OG1 THR 259  2181   2562   8277   -137  -996 - 7 9 4
ATOM   1763  CG2 THR 259  0.738  25.198 62.704 1.000 25.49
ANISOU 1763  CG2 THR 259  4466   2233   2987   325   396  - 9 4 8
ATOM   1764  C   THR 259  3.702  23.352 61.222 1.000 18.44
ANISOU 1764  C   THR 259  2035   2822   2150   -753  274  - 5 8 3
ATOM   1765  O   THR 259  4.835  23.698 61.603 1.000 24.74
ANISOU 1765  O   THR 259  1961   5370   2069   -964  231  - 7 1 4
ATOM   1766  N   SER 260  3.420  22.867 60.026 1.000 16.29
ANISOU 1766  N   SER 260  1971   2352   1864   -224  2  - 7 5
ATOM   1767  CA  SER 260  4.447  22.832 58.989 1.000 17.43
ANISOU 1767  CA  SER 260  1783   2961   1879   321   -95  - 7 2
ATOM   1768  CB  SER 260  5.224  21.514 58.956 1.000 20.17
ANISOU 1768  CB  SER 260  2306   3257   2100   762   -127 3 8 8
ATOM   1769  OG  SER 260  4.416  20.392 58.698 1.000 27.09
ANISOU 1769  OG  SER 260  3651   2803   3839   426   217  5 5 4
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ATOM   1770 C   SER  260 3.832   23.062  57.614  1.000 14.52
ANISOU 1770 C   SER  260 1463    2165    1889     83 -100   - 1
ATOM   1771 O   SER  260 2.686   22.681  57.402  1.000 15.92
ANISOU 1771 O   SER  260 1513    2489    2049    -93   -1 2 5 7
ATOM   1772 N   SER  261 4.617   23.660  56.742  1.000 13.45
ANISOU 1772 N   SER  261 1489    1832    1788    -190  -120 - 5 0 0
ATOM   1773 CA  SER  261 4.294   23.864  55.334  1.000 13.52
ANISOU 1773 CA  SER  261 1599    1726    1812    -204   30 - 3 1 5
ATOM   1774 C   SER  261 5.209   22.943  54.545  1.000 12.45
ANISOU 1774 C   SER  261 1332    1887    1513    -42   -240 - 1 6 1
ATOM   1775 O   SER  261 6.438   23.072  54.662  1.000 15.07
ANISOU 1775 O   SER  261 1344    1885    2497    -68   -331 - 3 4 3
ATOM   1776 CB  SER  261 4.446   25.330  54.943  1.000 17.76
ANISOU 1776 CB  SER  261 2718    1625    2404    -399  -485 - 3 1 8
ATOM   1777 OG  SER  261 4.428   25.554  53.570  1.000 27.54
ANISOU 1777 OG  SER  261 4342    3308    2814    -719  -821 9 5 5
ATOM   1778 N   VAL  262 4.623   22.045  53.782  1.000 10.90
ANISOU 1778 N   VAL  262 1215    1630    1299     41 -135   1 9
ATOM   1779 CA  VAL  262 5.393   21.031  53.026  1.000 11.61
ANISOU 1779 CA  VAL  262 1334    1634    1442    156   -103 1  7
ATOM   1780 CB  VAL  262 5.026   19.639  53.558  1.000 11.87
ANISOU 1780 CB  VAL  262 1262    1636    1614     9  -187   - 7 4
ATOM   1781 CG1 VAL  262 5.778   18.577  52.779  1.000 13.12
ANISOU 1781 CG1 VAL  262 1462    1527    1997    -2 185 5  1
ATOM   1782 CG2 VAL  262 5.262   19.564  55.062  1.000 17.08
ANISOU 1782 CG2 VAL  262 3390    1494    1604    -374  -245 3  9
ATOM   1783 C   VAL  262 5.096   21.149  51.543  1.000 11.18
ANISOU 1783 C   VAL  262 1026    1790    1431     1  -111   - 1 3 8
ATOM   1784 O   VAL  262 3.939   20.969  51.127  1.000 12.76
ANISOU 1784 O   VAL  262 1064    2137    1648    -251  -84   - 2 7 1
ATOM   1785 N   PHE  263 6.090   21.438  50.714  1.000 9.50
ANISOU 1785 N   PHE  263 995 1297     1316    -6 -210  -181
ATOM   1786 CA  PHE  263 5.933   21.637  49.288  1.000 9.61
ANISOU 1786 CA  PHE  263 1310    1017    1324    -6 -284   - 4 2
ATOM   1787 CB  PHE  263 6.486   23.002  48.848  1.000 10.94
ANISOU 1787 CB  PHE  263 1282    1055    1821    -50   -253 4
ATOM   1788 CG  PHE  263 6.150   23.399  47.418  1.000 10.35
ANISOU 1788 CG  PHE  263 779 1231     1921    -58    32 3 4 0
ATOM   1789 CD1 PHE  263 6.858   22.915  46.326  1.000 9.98
ANISOU 1789 CD1 PHE  263 766 1183     1841    -26   -101   2 4 0
ATOM   1790 CD2 PHE  263 5.106   24.277  47.148  1.000 11.95
ANISOU 1790 CD2 PHE  263 1229    1261    2052    245   -29  2 6 1
ATOM   1791 CE1 PHE  263 6.530   23.229  45.019  1.000 12.49
ANISOU 1791 CE1 PHE  263 1718    1173    1857     31 -370   1 3 6
ATOM   1792 CE2 PHE  263 4.769   24.601  45.836  1.000 13.12
ANISOU 1792 CE2 PHE  263 1451    1382    2151     43 -292   3 5 3
ATOM   1793 CZ  PHE  263 5.491   24.112  44.762  1.000 12.42
ANISOU 1793 CZ  PHE  263 1318    1453    1948    -138  -187 6 4 9
ATOM   1794 C   PHE  263 6.636   20.505  48.530  1.000 8.91
ANISOU 1794 C   PHE  263 1076    1085    1223    -39   -142 2  4
ATOM   1795 O   PHE  263 7.868   20.406  48.538  1.000 10.98
ANISOU 1795 O   PHE  263 1098    1233    1842    -120  -224 - 1 4 5
ATOM   1796 N   PHE  264 5.856   19.691  47.812  1.000 9.19
ANISOU 1796 N   PHE  264 1089    1266    1136    -86   -105 - 8 2
ATOM   1797 CA  PHE  264 6.386   18.602  46.991  1.000 9.64
ANISOU 1797 CA  PHE  264 1009    1238    1417    -56   -60   - 1 2 6
ATOM   1798 CB  PHE  264 5.483   17.358  47.005  1.000 9.92
ANISOU 1798 CB  PHE  264 1209    1201    1359    -78    17 9
ATOM   1799 CG  PHE  264 5.265   16.673  48.336  1.000 11.22
ANISOU 1799 CG  PHE  264 1241    1647    1374    -121   38 7  7
ATOM   1800 CD1 PHE  264 6.292   16.236  49.139  1.000 15.38
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ANISOU 1800 CD1 PHE  264 1467    2641    1734    -225  -8 8 7 3
ATOM   1801 CD2 PHE  264 3.988   16.433  48.808  1.000 16.96
ANISOU 1801 CD2 PHE  264 1425    3252    1769    -610  -79  9 5 8
ATOM   1802 CE1 PHE  264 6.090   15.596  50.336  1.000 14.52
ANISOU 1802 CE1 PHE  264 1745    2417    1354    162   334  4 5 2
ATOM   1803 CE2 PHE  264 3.755   15.796  50.019  1.000 18.04
ANISOU 1803 CE2 PHE  264 1747    3405    1704    -590  -109 1 0 0 8
ATOM   1804 CZ  PHE  264 4.817   15.354  50.779  1.000 12.52
ANISOU 1804 CZ  PHE  264 1772    1536    1449    -57   227  3 3 4
ATOM   1805 C   PHE  264 6.535   19.038  45.533  1.000 8.98
ANISOU 1805 C   PHE  264 1103    919  1392    143   81  - 9 2
ATOM   1806 O   PHE  264 5.497   19.368  44.930  1.000 9.79
ANISOU 1806 O   PHE  264 991 1190      1540    28 105   1 0 3
ATOM   1807 N   LEU  265 7.758   19.031  44.999  1.000 8.43
ANISOU 1807 N   LEU  265 992 884 1325    173 -180  1 5 8
ATOM   1808 CA  LEU  265 7.984   19.224  43.566  1.000 8.66
ANISOU 1808 CA  LEU  265 883 1066      1339    63 -33   - 7 6
ATOM   1809 CB  LEU  265 9.309   19.964  43.328  1.000 10.10
ANISOU 1809 CB  LEU  265 1179    1188    1469    -225  -220 2 4 8
ATOM   1810 CG  LEU  265 9.570   20.351  41.871  1.000 9.37
ANISOU 1810 CG  LEU  265 1072    1009    1478    242   25 1 2 9
ATOM   1811 CD1 LEU  265 8.725   21.522  41.408  1.000 10.80
ANISOU 1811 CD1 LEU  265 1291    1004    1811    181   -114 2 9 6
ATOM   1812 CD2 LEU  265 11.048  20.684  41.678  1.000 10.87
ANISOU 1812 CD2 LEU  265 1129    1483    1519    134   43 1 4 6
ATOM   1813 C   LEU  265 7.933   17.849  42.875  1.000 10.21
ANISOU 1813 C   LEU  265 932 1188      1760    -6 -38   - 3 0 2
ATOM   1814 O   LEU  265 8.858   17.043  43.042  1.000 10.45
ANISOU 1814 O   LEU  265 1388    969  1612    84 -217  1 0 7
ATOM   1815 N   ARG  266 6.853   17.530  42.135  1.000 10.00
ANISOU 1815 N   ARG  266 1325    1069    1404    -120  -222 1 5
ATOM   1816 CA  ARG  266 6.572   16.198  41.628  1.000 10.50
ANISOU 1816 CA  ARG  266 1219    1217    1554    -294  110  - 2 1 0
ATOM   1817 CB  ARG  266 5.208   15.675  42.124  1.000 10.56
ANISOU 1817 CB  ARG  266 978 1460      1574    -168 -103  - 1 0 5
ATOM   1818 CG  ARG  266 4.965   15.894  43.609  1.000 11.24
ANISOU 1818 CG  ARG  266 1337    1373    1563    -40   119  2 0 6
ATOM   1819 CD  ARG  266 3.668   15.318  44.146  1.000 11.17
ANISOU 1819 CD  ARG  266 1113    1567    1564    -17   -49  - 1 1
ATOM   1820 NE  ARG  266 2.508   15.879  43.447  1.000 9.43
ANISOU 1820 NE  ARG  266 1341    1157    1086    24 -100  - 1 4 5
ATOM   1821 CZ  ARG  266 1.236   15.509  43.657  1.000 9.83
ANISOU 1821 CZ  ARG  266 1245    1194    1294    132   -159 - 1
ATOM   1822 NH1 ARG  266 0.961   14.567  44.572  1.000 11.20
ANISOU 1822 NH1 ARG  266 1208    1240    1806    -144  -454 2 7 2
ATOM   1823 NH2 ARG  266 0.225   16.048  42.975  1.000 11.08
ANISOU 1823 NH2 ARG  266 1460    1265    1484    191   -283 7 3
ATOM   1824 C   ARG  266 6.601   16.190  40.099  1.000 10.28
ANISOU 1824 C   ARG  266 1273    1089    1545    -200  -5 - 1 6 7
ATOM   1825 O   ARG  266 6.027   17.109  39.519  1.000 11.05
ANISOU 1825 O   ARG  266 1254    1153    1793    -132  47 - 6 4
ATOM   1826 N   PRO  267 7.215   15.162  39.496  1.000 10.27
ANISOU 1826 N   PRO  267 1194    1239    1468    -33   130  3 2
ATOM   1827 CD  PRO  267 7.828   13.963  40.109  1.000 12.36
ANISOU 1827 CD  PRO  267 1865    1132    1697    -26   -529 - 1 9 2
ATOM   1828 CA  PRO  267 7.304   15.157  38.036  1.000 10.12
ANISOU 1828 CA  PRO  267 1278    1095    1472    -129  38 - 1 8 5
ATOM   1829 CB  PRO  267 8.250   13.986  37.767  1.000 11.83
ANISOU 1829 CB  PRO  267 1489    1088    1919    -72   90 - 3 2 2
ATOM   1830 CG  PRO  267 8.017   13.053  38.913  1.000 10.72
ANISOU 1830 CG  PRO  267 960 1356      1755    95 -257  - 1 8 7
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ATOM   1831 C   PRO 267 5.977  14.929 37.344 1.000 10.86
ANISOU 1831 C   PRO 267 1330   1226  1570  -252  47 -161
ATOM   1832 O   PRO 267 5.030  14.421 37.934 1.000 12.03
ANISOU 1832 O   PRO 267 1316   1174  2080  -258  17 7  7
ATOM   1833 N   ASN 268 5.931  15.288 36.065 1.000 10.61
ANISOU 1833 N   ASN 268 1216   1146  1670  -70  -86  -129
ATOM   1834 CA  ASN 268 4.810  14.949 35.198 1.000 11.20
ANISOU 1834 CA  ASN 268 1285   1349  1622  -167 -43  -229
ATOM   1835 CB  ASN 268 4.954  15.664 33.846 1.000 14.02
ANISOU 1835 CB  ASN 268 2160   1410  1756  132  -316 2  3
ATOM   1836 CG  ASN 268 4.992  17.175 33.992 1.000 13.03
ANISOU 1836 CG  ASN 268 1811   1393  1747  189  -355 - 8 8
ATOM   1837 OD1 ASN 268 4.046  17.748 34.566 1.000 16.65
ANISOU 1837 OD1 ASN 268 1910   1744  2673  292  -1 -159
ATOM   1838 ND2 ASN 268 6.037  17.818 33.495 1.000 14.19
ANISOU 1838 ND2 ASN 268 2505   1372  1516  161  264  -172
ATOM   1839 C   ASN 268 4.705  13.446 34.968 1.000 10.88
ANISOU 1839 C   ASN 268 1294   1314  1526  -75  -226 -164
ATOM   1840 O   ASN 268 5.715  12.732 34.979 1.000 11.68
ANISOU 1840 O   ASN 268 1534   1439  1464  87 -458  -121
ATOM   1841 N   ALA 269 3.484  12.980 34.688 1.000 12.22
ANISOU 1841 N   ALA 269 1484   1428  1732  -108 -397 -427
ATOM   1842 CA  ALA 269 3.277  11.547 34.417 1.000 12.12
ANISOU 1842 CA  ALA 269 1432   1356  1819  -238 -29  -282
ATOM   1843 CB  ALA 269 1.817  11.310 34.058 1.000 12.38
ANISOU 1843 CB  ALA 269 1439   1278  1985  -228 -183 2  9
ATOM   1844 C   ALA 269 4.125  10.981 33.283 1.000 11.26
ANISOU 1844 C   ALA 269 1445   1240  1592  25 -280  -141
ATOM   1845 O   ALA 269 4.493  9.800  33.263 1.000 12.53
ANISOU 1845 O   ALA 269 1428   1249  2085  -110  108  -188
ATOM   1846 N   ASP 270 4.438  11.799 32.276 1.000 11.47
ANISOU 1846 N   ASP 270 1701   1280  1378  -261 -341 -300
ATOM   1847 CA  ASP 270 5.214  11.378 31.113 1.000 11.92
ANISOU 1847 CA  ASP 270 1826   1106  1595  19 -183  -156
ATOM   1848 CB  ASP 270 4.760  12.096 29.850 1.000 14.13
ANISOU 1848 CB  ASP 270 1733   2038  1597  84 111 2 12
ATOM   1849 CG  ASP 270 5.050  13.568 29.777 1.000 15.98
ANISOU 1849 CG  ASP 270 2309   1939  1823  418  -418 5 6 4
ATOM   1850 OD1 ASP 270 5.432  14.186 30.762 1.000 21.61
ANISOU 1850 OD1 ASP 270 4101   1797  2312  176  -515 1 6 3
ATOM   1851 OD2 ASP 270 4.880  14.152 28.674 1.000 24.64
ANISOU 1851 OD2 ASP 270 3995   3221  2145  -62  -169 1 3 9 5
ATOM   1852 C   ASP 270 6.721  11.542 31.264 1.000 12.86
ANISOU 1852 C   ASP 270 1840   1392  1654  -398 -61  3 1 5
ATOM   1853 O   ASP 270 7.443  11.290 30.292 1.000 14.83
ANISOU 1853 O   ASP 270 1813   2114  1709  -346 -141 4  9
ATOM   1854 N   PHE 271 7.230  11.911 32.439 1.000 11.85
ANISOU 1854 N   PHE 271 1360   1316  1824  59 -25  7  0
ATOM   1855 CA  PHE 271 8.665  11.927 32.715 1.000 11.14
ANISOU 1855 CA  PHE 271 1242   1349  1641  10 230 1 6 2
ATOM   1856 CB  PHE 271 8.972  12.378 34.143 1.000 12.19
ANISOU 1856 CB  PHE 271 1467   1444  1722  -96  -3 1 8 2
ATOM   1857 CG  PHE 271 10.385 11.992 34.597 1.000 12.77
ANISOU 1857 CG  PHE 271 1411   1640  1800  42 31 5  6
ATOM   1858 CD1 PHE 271 11.475 12.488 33.904 1.000 13.22
ANISOU 1858 CD1 PHE 271 1513   1516  1993  168  220  4  9
ATOM   1859 CD2 PHE 271 10.624 11.155 35.666 1.000 13.55
ANISOU 1859 CD2 PHE 271 1343   1674  2131  139  84 2 5 5
ATOM   1860 CE1 PHE 271 12.779 12.178 34.249 1.000 14.26
ANISOU 1860 CE1 PHE 271 1432   1760  2225  -39  46 -416
ATOM   1861 CE2 PHE 271 11.925 10.806 36.019 1.000 15.88
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ANISOU 1861 CE2 PHE 271 1537   1818   2679   -263  -675 2 6 0
ATOM   1862 CZ  PHE 271 13.006 11.288 35.304 1.000 14.15
ANISOU 1862 CZ  PHE 271 1166   1736   2475   7  -531  -4 6 7
ATOM   1863 C   PHE 271 9.259  10.550 32.410 1.000 11.27
ANISOU 1863 C   PHE 271 1359   1338   1585   75 271 3 4 8
ATOM   1864 O   PHE 271 8.785  9.531  32.920 1.000 12.97
ANISOU 1864 O   PHE 271 2011   1320   1596   -85   473  2 7 9
ATOM   1865 N   THR 272 10.261 10.498 31.541 1.000 11.95
ANISOU 1865 N   THR 272 1018   1503   2020   -214  300  -1 1 5
ATOM   1866 CA  THR 272 10.823 9.254  30.992 1.000 12.70
ANISOU 1866 CA  THR 272 1615   1557   1652   132   341  1 4 6
ATOM   1867 CB  THR 272 10.679 9.281  29.450 1.000 16.79
ANISOU 1867 CB  THR 272 1814   2829   1737   -595  157  -4 0 6
ATOM   1868 OG1 THR 272 9.301  9.471  29.090 1.000 18.02
ANISOU 1868 OG1 THR 272 1912   2921   2013   -497  -73  9 1
ATOM   1869 CG2 THR 272 11.200 7.976  28.856 1.000 17.02
ANISOU 1869 CG2 THR 272 2144   2857   1467   -475  538  -1 9 4
ATOM   1870 C   THR 272 12.272 9.057  31.423 1.000 12.02
ANISOU 1870 C   THR 272 1436   1573   1559   92 603 1 3 7
ATOM   1871 O   THR 272 13.055 10.031 31.437 1.000 14.17
ANISOU 1871 O   THR 272 1451   1583   2351   125   602  4 1 2
ATOM   1872 N   PHE 273 12.625 7.837  31.828 1.000 12.34
ANISOU 1872 N   PHE 273 1402   1585   1703   17 378 1 5 8
ATOM   1873 CA  PHE 273 13.953 7.492  32.312 1.000 12.20
ANISOU 1873 CA  PHE 273 1362   1364   1909   -126  336  1 4 7
ATOM   1874 CB  PHE 273 13.951 7.514  33.861 1.000 12.37
ANISOU 1874 CB  PHE 273 1362   1447   1890   -102  211  - 8
ATOM   1875 CG  PHE 273 12.988 6.528  34.491 1.000 11.65
ANISOU 1875 CG  PHE 273 1398   1631   1396   -367  42 -2 1 5
ATOM   1876 CD1 PHE 273 11.684 6.889  34.773 1.000 14.11
ANISOU 1876 CD1 PHE 273 1531   2214   1614   -336  293  - 6 2
ATOM   1877 CD2 PHE 273 13.409 5.245  34.803 1.000 13.20
ANISOU 1877 CD2 PHE 273 2024   1639   1352   -358  339  - 9
ATOM   1878 CE1 PHE 273 10.793 5.993  35.323 1.000 13.25
ANISOU 1878 CE1 PHE 273 1536   2081   1418   -98   447  4 2
ATOM   1879 CE2 PHE 273 12.530 4.329  35.327 1.000 13.39
ANISOU 1879 CE2 PHE 273 1529   1905   1654   -224  140  2 8 3
ATOM   1880 CZ  PHE 273 11.227 4.706  35.604 1.000 14.75
ANISOU 1880 CZ  PHE 273 1444   2260   1902   -90  -186 2 7 5
ATOM   1881 C   PHE 273 14.423 6.135  31.795 1.000 12.45
ANISOU 1881 C   PHE 273 1278   1526   1927   -120  317  - 3 1
ATOM   1882 O   PHE 273 13.645 5.311  31.291 1.000 11.95
ANISOU 1882 O   PHE 273 1590   1580   1370   -137  226  - 1 3
ATOM   1883 N   SER 274 15.717 5.854  31.952 1.000 12.07
ANISOU 1883 N   SER 274 1270   1640   1677   -29   558  3 5 3
ATOM   1884 CA  SER 274 16.335 4.586  31.604 1.000 14.39
ANISOU 1884 CA  SER 274 1583   1534   2349   43 707 3 8 4
ATOM   1885 CB  SER 274 17.845 4.771  31.438 1.000 14.49
ANISOU 1885 CB  SER 274 1578   1727   2202   213   695  3 2 9
ATOM   1886 OG  SER 274 18.564 3.558  31.424 1.000 14.97
ANISOU 1886 OG  SER 274 1763   1848   2078   349   348  - 1 3
ATOM   1887 C   SER 274 16.100 3.505  32.666 1.000 13.12
ANISOU 1887 C   SER 274 1670   1481   1833   8  461 1 3 7
ATOM   1888 O   SER 274 16.438 3.700  33.834 1.000 13.50
ANISOU 1888 O   SER 274 1493   1518   2116   -65   119  1 5
ATOM   1889 N   VAL 275 15.533 2.359  32.271 1.000 11.90
ANISOU 1889 N   VAL 275 1476   1618   1427   -110  490  1 9 5
ATOM   1890 CA  VAL 275 15.283 1.254  33.180 1.000 11.41
ANISOU 1890 CA  VAL 275 1708   1424   1204   -8 286 7 6
ATOM   1891 CB  VAL 275 14.346 0.198  32.543 1.000 12.74
ANISOU 1891 CB  VAL 275 1732   1300   1809   62 164 - 1 6
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ATOM   1892 CG1 VAL  275 14.157  -1.020  33.437  1.000 16.10
ANISOU 1892 CG1 VAL  275 2352    1803    1962    -614  -663 3 7 0
ATOM   1893 CG2 VAL  275 12.961  0.763   32.261  1.000 13.81
ANISOU 1893 CG2 VAL  275 1535    1786    1924    16 363 1 2 6
ATOM   1894 C   VAL  275 16.577  0.622   33.692  1.000 12.62
ANISOU 1894 C   VAL  275 1574    1628    1594    14 375 1 3 6
ATOM   1895 O   VAL  275 16.729  0.405   34.926  1.000 13.01
ANISOU 1895 O   VAL  275 1667    1643    1634    9  118 1 8 0
ATOM   1896 N   PRO  276 17.569  0.286   32.889  1.000 14.64
ANISOU 1896 N   PRO  276 1583    2066    1914    2  454 - 4 2
ATOM   1897 CD  PRO  276 17.583  0.285   31.415  1.000 15.84
ANISOU 1897 CD  PRO  276 1565    2536    1916    89 755 3 5
ATOM   1898 CA  PRO  276 18.827  -0.250  33.453  1.000 16.76
ANISOU 1898 CA  PRO  276 1667    2403    2296    261   393  -1 6 3
ATOM   1899 CB  PRO  276 19.732  -0.503  32.236  1.000 18.27
ANISOU 1899 CB  PRO  276 1804    2568    2571    411   574  -1 4 2
ATOM   1900 CG  PRO  276 18.868  -0.385  31.029  1.000 18.96
ANISOU 1900 CG  PRO  276 2147    2763    2293    725   694  - 3 7
ATOM   1901 C   PRO  276 19.500  0.710   34.420  1.000 16.32
ANISOU 1901 C   PRO  276 1521    2342    2336    115   237  6 7
ATOM   1902 O   PRO  276 20.035  0.277   35.456  1.000 16.78
ANISOU 1902 O   PRO  276 1411    2689    2275    93 376 2 5 3
ATOM   1903 N   LEU  277 19.475  2.019   34.155  1.000 16.58
ANISOU 1903 N   LEU  277 1835    2412    2052    -15   483  1 4 8
ATOM   1904 CA  LEU  277 20.142  2.919   35.099  1.000 17.70
ANISOU 1904 CA  LEU  277 1990    2226    2511    -21   362  1 1 8
ATOM   1905 CB  LEU  277 20.298  4.277   34.425  1.000 20.20
ANISOU 1905 CB  LEU  277 2952    2292    2432    -1 -14 2 7 1
ATOM   1906 CG  LEU  277 21.048  5.359   35.186  1.000 20.86
ANISOU 1906 CG  LEU  277 2213    2221    3490    -32   -355 4 8 2
ATOM   1907 CD1 LEU  277 22.446  4.888   35.531  1.000 34.24
ANISOU 1907 CD1 LEU  277 2157    2303    8552    69 -842  2 5 8
ATOM   1908 CD2 LEU  277 21.062  6.620   34.334  1.000 31.91
ANISOU 1908 CD2 LEU  277 4745    2460    4918    -474  -572 1 1 5 0
ATOM   1909 C   LEU  277 19.411  2.989   36.430  1.000 16.55
ANISOU 1909 C   LEU  277 1975    1885    2430    -218  211  - 2 4 3
ATOM   1910 O   LEU  277 19.997  3.116   37.517  1.000 19.19
ANISOU 1910 O   LEU  277 2179    2636    2476    -617  50 1 2 2
ATOM   1911 N   ALA  278 18.080  2.905   36.386  1.000 15.48
ANISOU 1911 N   ALA  278 2008    1904    1969    -358  279  1 1 2
ATOM   1912 CA  ALA  278 17.308  2.896   37.636  1.000 14.51
ANISOU 1912 CA  ALA  278 2109    1763    1641    -309  74 1 6 7
ATOM   1913 CB  ALA  278 15.814  2.896   37.347  1.000 15.41
ANISOU 1913 CB  ALA  278 2017    1773    2064    66 301 6 2 6
ATOM   1914 C   ALA  278 17.710  1.684   38.479  1.000 14.55
ANISOU 1914 C   ALA  278 1972    1869    1689    -195  -255 7  9
ATOM   1915 O   ALA  278 17.894  1.770   39.683  1.000 13.80
ANISOU 1915 O   ALA  278 1444    2144    1655    -250  -166 8  9
ATOM   1916 N   ARG  279 17.841  0.530   37.842  1.000 13.86
ANISOU 1916 N   ARG  279 1795    1728    1742    -432  -128 1 6 9
ATOM   1917 CA  ARG  279 18.242  -0.679  38.560  1.000 15.88
ANISOU 1917 CA  ARG  279 1995    1973    2064    59 355 4 1 1
ATOM   1918 CB  ARG  279 18.204  -1.922  37.648  1.000 16.83
ANISOU 1918 CB  ARG  279 1889    1897    2609    84 544 2 5 0
ATOM   1919 CG  ARG  279 16.790  -2.323  37.291  1.000 19.63
ANISOU 1919 CG  ARG  279 2123    2196    3139    -63   233  9  1
ATOM   1920 CD  ARG  279 16.656  -3.288  36.131  1.000 27.03
ANISOU 1920 CD  ARG  279 3924    3198    3150    -603  -275 - 1 9 8
ATOM   1921 NE  ARG  279 17.236  -4.578  36.364  1.000 27.45
ANISOU 1921 NE  ARG  279 4659    2854    2915    -359  751  - 7 8 9
ATOM   1922 CZ  ARG  279 16.714  -5.717  36.779  1.000 32.85
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ANISOU 1922 CZ  ARG  279 4486    3045    4948    -475  448  -222
ATOM   1923 NH1 ARG  279 15.424  -5.874  37.089  1.000 29.96
ANISOU 1923 NH1 ARG  279 4653    2168    4562    -103  967  -678
ATOM   1924 NH2 ARG  279 17.551  -6.750  36.890  1.000 37.87
ANISOU 1924 NH2 ARG  279 4879    2436    7074    -276  3278 -824
ATOM   1925 C   ARG  279 19.628  -0.519  39.150  1.000 17.48
ANISOU 1925 C   ARG  279 2118    1653    2871    75 -8 705
ATOM   1926 O   ARG  279 19.916  -1.064  40.212  1.000 26.82
ANISOU 1926 O   ARG  279 3764    3102    3325    -1987 -1467 1383
ATOM   1927 N   GLU  280 20.538  0.189   38.505  1.000 17.73
ANISOU 1927 N   GLU  280 1983    2293    2459    109   609  3  7
ATOM   1928 CA  GLU  280 21.899  0.317   39.026  1.000 19.66
ANISOU 1928 CA  GLU  280 2049    2023    3396    125   215  737
ATOM   1929 CB  GLU  280 22.836  0.886   37.936  1.000 20.17
ANISOU 1929 CB  GLU  280 1648    2457    3560    464   138  1099
ATOM   1930 CG  GLU  280 22.964  -0.149  36.818  1.000 31.79
ANISOU 1930 CG  GLU  280 3477    4175    4427    801   1187 -  4
ATOM   1931 CD  GLU  280 23.698  0.341   35.590  1.000 39.66
ANISOU 1931 CD  GLU  280 5144    5703    4221    -64   1339 -  6
ATOM   1932 OE1 GLU  280 24.466  1.327   35.685  1.000 39.65
ANISOU 1932 OE1 GLU  280 3464    5891    5710    334   574  1639
ATOM   1933 OE2 GLU  280 23.489  -0.294  34.519  1.000 41.55
ANISOU 1933 OE2 GLU  280 5257    6747    3781    2245  -184 102
ATOM   1934 C   GLU  280 21.984  1.188   40.266  1.000 19.68
ANISOU 1934 C   GLU  280 1488    2350    3640    -566  162  490
ATOM   1935 O   GLU  280 23.031  1.142   40.958  1.000 25.69
ANISOU 1935 O   GLU  280 1871    3766    4123    231   -245 180
ATOM   1936 N   CYS  281 20.943  1.980   40.565  1.000 18.57
ANISOU 1936 N   CYS  281 1560    2609    2887    -406  -211 176
ATOM   1937 CA  CYS  281 21.098  2.762   41.806  1.000 23.83
ANISOU 1937 CA  CYS  281 3222    2647    3184    -1189 176  -122
ATOM   1938 CB  CYS  281 21.079  4.264   41.523  1.000 25.40
ANISOU 1938 CB  CYS  281 3278    2655    3718    -426  368  - 46
ATOM   1939 SG  CYS  281 19.587  4.904   40.763  1.000 27.05
ANISOU 1939 SG  CYS  281 3069    2914    4295    -522  -37  -794
ATOM   1940 C   CYS  281 20.098  2.406   42.907  1.000 16.99
ANISOU 1940 C   CYS  281 1377    1604    3475    109   -6 -546
ATOM   1941 O   CYS  281 19.971  3.173   43.889  1.000 17.04
ANISOU 1941 O   CYS  281 2294    1277    2902    -204  -484 -129
ATOM   1942 N   GLY  282 19.447  1.245   42.794  1.000 15.23
ANISOU 1942 N   GLY  282 1617    1597    2572    3  -58 - 436
ATOM   1943 CA  GLY  282 18.731  0.674   43.914  1.000 15.61
ANISOU 1943 CA  GLY  282 1565    1973    2394    6  -331  -266
ATOM   1944 C   GLY  282 17.246  0.519   43.727  1.000 13.75
ANISOU 1944 C   GLY  282 1635    1562    2029    -270  -446 - 78
ATOM   1945 O   GLY  282 16.585  0.012   44.639  1.000 14.99
ANISOU 1945 O   GLY  282 1751    1630    2313    207   -242 455
ATOM   1946 N   PHE  283 16.744  1.009   42.582  1.000 12.65
ANISOU 1946 N   PHE  283 1434    1803    1570    -200  18 -252
ATOM   1947 CA  PHE  283 15.292  0.886   42.374  1.000 11.80
ANISOU 1947 CA  PHE  283 1477    1032    1974    -15   -264 4  6
ATOM   1948 CB  PHE  283 14.839  1.890   41.295  1.000 14.13
ANISOU 1948 CB  PHE  283 2262    972  2136    109   -187  159
ATOM   1949 CG  PHE  283 14.906  3.351   41.757  1.000 12.63
ANISOU 1949 CG  PHE  283 1711    1033    2055    47 -86 9
ATOM   1950 CD1 PHE  283 13.851  3.928   42.409  1.000 13.45
ANISOU 1950 CD1 PHE  283 1697    1399    2013    -166  24 -229
ATOM   1951 CD2 PHE  283 16.037  4.111   41.519  1.000 13.15
ANISOU 1951 CD2 PHE  283 1567    1135    2295    142   -41  - 99
ATOM   1952 CE1 PHE  283 13.903  5.248   42.839  1.000 15.61
ANISOU 1952 CE1 PHE  283 2111    1649    2171    -202  484  -617
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ATOM   1953 CE2 PHE  283 16.112  5.432  41.963 1.000 12.60
ANISOU 1953 CE2 PHE  283  1783   937  2068    32  -18   264
ATOM   1954 CZ  PHE  283 15.040  5.993  42.641 1.000 13.37
ANISOU 1954 CZ  PHE  283  1863   865  2352   187  -149   13
ATOM   1955 C   PHE  283 14.915 -0.534  41.972 1.000 11.23
ANISOU 1955 C   PHE  283  1527   974  1765    63  -172   65
ATOM   1956 O   PHE  283 15.471 -1.071  40.990 1.000 13.24
ANISOU 1956 O   PHE  283  1249  1428  2355   175  -120  -361
ATOM   1957 N   ASP  284 13.998 -1.130  42.712 1.000 12.31
ANISOU 1957 N   ASP  284  1607  1333  1736  -268  -312   87
ATOM   1958 CA  ASP  284 13.589 -2.528  42.527 1.000 12.48
ANISOU 1958 CA  ASP  284  1725  1202  1814  -148  -543   350
ATOM   1959 CB  ASP  284 13.159 -3.156  43.876 1.000 12.67
ANISOU 1959 CB  ASP  284  2014  1145  1656   -50  -406   135
ATOM   1960 CG  ASP  284 13.261 -4.667  43.909 1.000 13.40
ANISOU 1960 CG  ASP  284  2077  1171  1843   110  -419   363
ATOM   1961 OD1 ASP  284 13.861 -5.246  42.974 1.000 14.98
ANISOU 1961 OD1 ASP  284  1956  1094  2640   -87   116   0
ATOM   1962 OD2 ASP  284 12.762 -5.306  44.883 1.000 15.79
ANISOU 1962 OD2 ASP  284  2494  1539  1966  -330  -446   438
ATOM   1963 C   ASP  284 12.478 -2.641  41.510 1.000 10.82
ANISOU 1963 C   ASP  284  1238  1387  1487  -205   -99   123
ATOM   1964 O   ASP  284 11.373 -3.100  41.777 1.000 12.28
ANISOU 1964 O   ASP  284  1331  1175  2159  -209   481   91
ATOM   1965 N   VAL  285 12.751 -2.154  40.308 1.000 11.32
ANISOU 1965 N   VAL  285  1204  1671  1426   -93   -48    61
ATOM   1966 CA  VAL  285 11.748 -2.062  39.260 1.000 11.45
ANISOU 1966 CA  VAL  285  1468  1384  1500   -39  -219   -15
ATOM   1967 CB  VAL  285 12.153 -1.072  38.157 1.000 11.58
ANISOU 1967 CB  VAL  285  1412  1523  1465  -388  -428    -8
ATOM   1968 CG1 VAL  285 12.278  0.362  38.679 1.000 15.02
ANISOU 1968 CG1 VAL  285  2209  1458  2040   -64  -264  -442   -32
ATOM   1969 CG2 VAL  285 13.467 -1.482  37.495 1.000 15.70
ANISOU 1969 CG2 VAL  285  1909  1443  2615  -159   309   447
ATOM   1970 C   VAL  285 11.424 -3.431  38.642 1.000 10.83
ANISOU 1970 C   VAL  285  1232  1281  1602    93  -221   108
ATOM   1971 O   VAL  285 12.267 -4.301  38.520 1.000 12.13
ANISOU 1971 O   VAL  285  1214  1192  2202   -28   300   162
ATOM   1972 N   SER  286 10.168 -3.523  38.248 1.000 11.09
ANISOU 1972 N   SER  286  1116  1608  1489   -76    96    7
ATOM   1973 CA  SER  286 9.558 -4.622  37.510 1.000 11.32
ANISOU 1973 CA  SER  286  1104  1479  1718   -41  -274   252
ATOM   1974 CB  SER  286 8.483 -5.292  38.344 1.000 9.88
ANISOU 1974 CB  SER  286  1328  1141  1285    72  -207    70
ATOM   1975 OG  SER  286 7.570 -4.361  38.905 1.000 11.34
ANISOU 1975 OG  SER  286  1391  1188  1729   147   -153    75
ATOM   1976 C   SER  286 9.019 -4.106  36.175 1.000 10.34
ANISOU 1976 C   SER  286  1127  1227  1575    28   -87   245
ATOM   1977 O   SER  286 7.829 -4.112  35.869 1.000 12.62
ANISOU 1977 O   SER  286  1223  2219  1353     0  -178   228
ATOM   1978 N   LEU  287 9.926 -3.622  35.335 1.000 12.45
ANISOU 1978 N   LEU  287  1414  1664  1653  -212    3   161
ATOM   1979 CA  LEU  287 9.654 -2.900  34.099 1.000 12.59
ANISOU 1979 CA  LEU  287  1622  1558  1605  -366   941   84
ATOM   1980 CB  LEU  287 10.145 -1.452  34.210 1.000 12.91
ANISOU 1980 CB  LEU  287  1716  1591  1597  -373   -95    27
ATOM   1981 CG  LEU  287 9.452 -0.590  35.264 1.000 12.96
ANISOU 1981 CG  LEU  287  1182  1848  1895  -407   -51  -170
ATOM   1982 CD1 LEU  287 10.229  0.708  35.484 1.000 13.34
ANISOU 1982 CD1 LEU  287  1644  1108  2318   -38  -124   223
ATOM   1983 CD2 LEU  287 8.006 -0.248  34.914 1.000 14.56
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ANISOU 1983 CD2 LEU  287 1716    1548    2267    36 -550  318
ATOM   1984 C   LEU  287 10.319  -3.610  32.928  1.000 12.63
ANISOU 1984 C   LEU  287 1837    1244    1719    -233  248  354
ATOM   1985 O   LEU  287 11.529  -3.805  32.916  1.000 16.68
ANISOU 1985 O   LEU  287 1779    1998    2560    -292  390  -149
ATOM   1986 N   ASP  288 9.531   -4.045  31.950  1.000 13.91
ANISOU 1986 N   ASP  288 2080    1751    1455    4  223 227
ATOM   1987 CA  ASP  288 10.079  -4.688  30.759  1.000 15.50
ANISOU 1987 CA  ASP  288 2029    2269    1593    -122  605  153
ATOM   1988 CB  ASP  288 8.979   -5.478  30.043  1.000 17.00
ANISOU 1988 CB  ASP  288 2722    2125    1613    -250  362  - 2
ATOM   1989 CG  ASP  288 9.480   -6.452  29.014  1.000 19.30
ANISOU 1989 CG  ASP  288 2467    2980    1885    173   243  -377
ATOM   1990 OD1 ASP  288 10.447  -7.183  29.292  1.000 25.95
ANISOU 1990 OD1 ASP  288 2812    3190    3856    501   -239 -783
ATOM   1991 OD2 ASP  288 8.911   -6.508  27.907  1.000 31.76
ANISOU 1991 OD2 ASP  288 5375    4430    2260    1266  -849 -1154
ATOM   1992 C   ASP  288 10.654  -3.652  29.811  1.000 17.08
ANISOU 1992 C   ASP  288 2259    2631    1602    -263  248  534
ATOM   1993 O   ASP  288 10.197  -2.502  29.708  1.000 23.31
ANISOU 1993 O   ASP  288 4276    2268    2313    -244  -13  297
ATOM   1994 N   GLY  289 11.702  -3.966  29.049  1.000 21.26
ANISOU 1994 N   GLY  289 2748    3699    1632    -610  752  511
ATOM   1995 CA  GLY  289 12.116  -2.880  28.152  1.000 21.65
ANISOU 1995 CA  GLY  289 2842    3988    1396    -1163 71 626
ATOM   1996 C   GLY  289 13.084  -1.859  28.736  1.000 22.09
ANISOU 1996 C   GLY  289 2888    3509    1996    -738  -23  243
ATOM   1997 O   GLY  289 13.414  -1.836  29.924  1.000 20.34
ANISOU 1997 O   GLY  289 3230    2606    1891    -918  124  147
ATOM   1998 N   GLU  290 13.562  -0.952  27.869  1.000 16.48
ANISOU 1998 N   GLU  290 2665    2099    1496    5  222 -445
ATOM   1999 CA  GLU  290 14.716  -0.117  28.182  1.000 16.94
ANISOU 1999 CA  GLU  290 2470    2161    1806    81 411 -484
ATOM   2000 CB  GLU  290 15.579  0.012   26.912  1.000 20.26
ANISOU 2000 CB  GLU  290 2670    2740    2287    414   863  -239
ATOM   2001 CG  GLU  290 16.071  -1.333  26.386  1.000 24.53
ANISOU 2001 CG  GLU  290 3251    3153    2916    664   1218 -612
ATOM   2002 CD  GLU  290 16.812  -2.170  27.411  1.000 27.91
ANISOU 2002 CD  GLU  290 3019    3161    4424    989   940  -251
ATOM   2003 OE1 GLU  290 17.874  -1.747  27.917  1.000 35.13
ANISOU 2003 OE1 GLU  290 3913    4458    4975    963   -85  -877
ATOM   2004 OE2 GLU  290 16.336  -3.280  27.734  1.000 43.76
ANISOU 2004 OE2 GLU  290 6893    3257    6478    -30   -748 598
ATOM   2005 C   GLU  290 14.406  1.271   28.716  1.000 14.67
ANISOU 2005 C   GLU  290 2512    1756    1308    95 142 1 0
ATOM   2006 O   GLU  290 15.260  1.840   29.412  1.000 15.25
ANISOU 2006 O   GLU  290 2074    1969    1750    50 418 -262
ATOM   2007 N   THR  291 13.232  1.814   28.437  1.000 15.72
ANISOU 2007 N   THR  291 2173    2393    1406    78 346 -519
ATOM   2008 CA  THR  291 12.792  3.087   28.991  1.000 15.16
ANISOU 2008 CA  THR  291 2080    1845    1833    -88  631  - 15
ATOM   2009 CB  THR  291 12.766  4.226   27.956  1.000 18.67
ANISOU 2009 CB  THR  291 2724    2529    1842    -361  769  336
ATOM   2010 OG1 THR  291 11.756  4.009   26.976  1.000 22.93
ANISOU 2010 OG1 THR  291 3313    3135    2265    445   78 146
ATOM   2011 CG2 THR  291 14.096  4.306   27.213  1.000 21.82
ANISOU 2011 CG2 THR  291 3035    2126    3130    357   1450 902
ATOM   2012 C   THR  291 11.402  2.920   29.622  1.000 12.86
ANISOU 2012 C   THR  291 1863    1604    1421    47 305 219
ATOM   2013 O   THR  291 10.625  2.024   29.270  1.000 16.13
ANISOU 2013 O   THR  291 2344    1983    1804    -303  750  -431
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ATOM   2014 N   ALA  292 11.037  3.791  30.542 1.000 12.41
ANISOU 2014 N   ALA  292 1495    1363   1859    -2 256 7 7
ATOM   2015 CA  ALA  292 9.746   3.839  31.202 1.000 11.57
ANISOU 2015 CA  ALA  292 1362    1257   1779    -213  153  3 7
ATOM   2016 CB  ALA  292 9.718   2.954  32.439 1.000 12.62
ANISOU 2016 CB  ALA  292 1768    1245   1784    100   357  4
ATOM   2017 C   ALA  292 9.385   5.255  31.614 1.000 10.32
ANISOU 2017 C   ALA  292 1317    1335   1270    -181  99 5 4
ATOM   2018 O   ALA  292 10.266  6.134  31.701 1.000 10.97
ANISOU 2018 O   ALA  292 1389    1138   1641    -146  279  1 0 4
ATOM   2019 N   THR  293 8.091   5.445  31.882 1.000 12.32
ANISOU 2019 N   THR  293 1486    1547   1647    -314  563  -2 8 4
ATOM   2020 CA  THR  293 7.626   6.715  32.421 1.000 12.28
ANISOU 2020 CA  THR  293 1717    1460   1489    -168  337  -2 0 0
ATOM   2021 CB  THR  293 6.352   7.215  31.733 1.000 13.27
ANISOU 2021 CB  THR  293 2128    1182   1730    -258  -159 -2 8 4
ATOM   2022 OG1 THR  293 5.317   6.237  31.911 1.000 13.85
ANISOU 2022 OG1 THR  293 1831    1217   2216    8  -131  7 4
ATOM   2023 CG2 THR  293 6.474   7.303  30.212 1.000 13.72
ANISOU 2023 CG2 THR  293 1791    1683   1738    -252  -56  -4 0 5
ATOM   2024 C   THR  293 7.363   6.635  33.937 1.000 10.58
ANISOU 2024 C   THR  293 1439    1050   1533    12 447 9
ATOM   2025 O   THR  293 7.211   5.576  34.553 1.000 10.29
ANISOU 2025 O   THR  293 1049    1102   1758    -56   93 1 1 8
ATOM   2026 N   PHE  294 7.243   7.810  34.569 1.000 11.53
ANISOU 2026 N   PHE  294 1794    1093   1494    -307  306  - 6 6
ATOM   2027 CA  PHE  294 6.806   7.939  35.950 1.000 10.41
ANISOU 2027 CA  PHE  294 1432    1061   1463    -174  125  - 1 6 2
ATOM   2028 CB  PHE  294 6.709   9.426  36.336 1.000 12.25
ANISOU 2028 CB  PHE  294 1930    1030   1694    -164  292  - 6 4
ATOM   2029 CG  PHE  294 6.270   9.658  37.770 1.000 12.77
ANISOU 2029 CG  PHE  294 1880    1136   1837    -103  178  - 4 2 7
ATOM   2030 CD1 PHE  294 7.123   9.462  38.839 1.000 14.73
ANISOU 2030 CD1 PHE  294 1976    1893   1727    -539  161  - 1 3 2
ATOM   2031 CD2 PHE  294 4.989   10.068 38.056 1.000 16.59
ANISOU 2031 CD2 PHE  294 2180    1923   2199    348   386  - 4 9 2
ATOM   2032 CE1 PHE  294 6.726   9.673  40.144 1.000 14.36
ANISOU 2032 CE1 PHE  294 1598    2028   1830    -505  280  - 1 1 8
ATOM   2033 CE2 PHE  294 4.575   10.275 39.345 1.000 16.75
ANISOU 2033 CE2 PHE  294 2214    2062   2087    692   144  - 6 0 2
ATOM   2034 CZ  PHE  294 5.426   10.065 40.413 1.000 15.17
ANISOU 2034 CZ  PHE  294 2040    1426   2296    327   97 - 1 3 5
ATOM   2035 C   PHE  294 5.484   7.195  36.172 1.000 10.89
ANISOU 2035 C   PHE  294 1401    1200   1536    -155  78 1 3 7
ATOM   2036 O   PHE  294 5.325   6.425  37.125 1.000 10.67
ANISOU 2036 O   PHE  294 1396    1297   1360    90 337 1 0 5
ATOM   2037 N   GLN  295 4.487   7.355  35.299 1.000 10.62
ANISOU 2037 N   GLN  295 1399    1187   1450    -18   88 - 2 4
ATOM   2038 CA  GLN  295 3.217   6.612  35.393 1.000 11.31
ANISOU 2038 CA  GLN  295 1433    1205   1660    -96   120  - 3 2 1
ATOM   2039 CB  GLN  295 2.284   7.053  34.254 1.000 11.66
ANISOU 2039 CB  GLN  295 1425    1053   1953    -25   63 - 1 4 1
ATOM   2040 CG  GLN  295 0.951   6.360  34.200 1.000 11.05
ANISOU 2040 CG  GLN  295 1573    1011   1614    -93   -118 1 8
ATOM   2041 CD  GLN  295 0.052   6.843  33.087 1.000 11.35
ANISOU 2041 CD  GLN  295 1592    1326   1395    173   57 - 1 3
ATOM   2042 OE1 GLN  295 0.349   7.823  32.378 1.000 15.06
ANISOU 2042 OE1 GLN  295 2306    1589   1825    110   7  3 7 9
ATOM   2043 NE2 GLN  295 -1.053  6.153  32.914 1.000 13.90
ANISOU 2043 NE2 GLN  295 1511    1757   2015    156   -282 2 0 8
ATOM   2044 C   GLN  295 3.412   5.107  35.389 1.000 10.12
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ANISOU	2044	C	GLN	295	1154	1203	1486	21	160	-191	
ATOM	2045	O	GLN	295	2.827	4.309	36.128	1.000	11.82		
ANISOU	2045	O	GLN	295	1264	1542	1686	-107	41	137	
ATOM	2046	N	ASP	296	4.267	4.558	34.538	1.000	9.35		
ANISOU	2046	N	ASP	296	1076	1056	1422	-118	-76	-275	
ATOM	2047	CA	ASP	296	4.655	3.172	34.416	1.000	9.91		
ANISOU	2047	CA	ASP	296	1241	1139	1387	56	60	-243	
ATOM	2048	CB	ASP	296	5.699	2.852	33.347	1.000	10.26		
ANISOU	2048	CB	ASP	296	1315	1156	1429	113	132	-36	
ATOM	2049	CG	ASP	296	5.343	2.981	31.885	1.000	11.42		
ANISOU	2049	CG	ASP	296	1357	1578	1405	358	121	-199	
ATOM	2050	OD1	ASP	296	4.143	2.904	31.531	1.000	13.82		
ANISOU	2050	OD1	ASP	296	1511	1744	1997	149	-209	-62	
ATOM	2051	OD2	ASP	296	6.282	3.151	31.047	1.000	13.48		
ANISOU	2051	OD2	ASP	296	1802	1758	1564	228	364	73	
ATOM	2052	C	ASP	296	5.175	2.682	35.770	1.000	10.31		
ANISOU	2052	C	ASP	296	1416	1141	1361	16	91	-198	
ATOM	2053	O	ASP	296	4.852	1.551	36.197	1.000	11.40		
ANISOU	2053	O	ASP	296	1428	1452	1453	-288	32	35	
ATOM	2054	N	TRP	297	6.004	3.484	36.441	1.000	10.88		
ANISOU	2054	N	TRP	297	1752	1144	1238	-161	11	55	
ATOM	2055	CA	TRP	297	6.646	3.104	37.685	1.000	11.26		
ANISOU	2055	CA	TRP	297	1768	1215	1294	-217	-57	4	5
ATOM	2056	CB	TRP	297	7.899	3.999	37.890	1.000	10.31		
ANISOU	2056	CB	TRP	297	1387	1417	1112	-87	213	120	
ATOM	2057	CG	TRP	297	8.621	3.651	39.172	1.000	10.98		
ANISOU	2057	CG	TRP	297	1456	1394	1324	164	-29	-43	
ATOM	2058	CD2	TRP	297	9.082	4.534	40.202	1.000	12.49		
ANISOU	2058	CD2	TRP	297	1255	1729	1761	75	-298	-197	
ATOM	2059	CE2	TRP	297	9.692	3.755	41.201	1.000	16.08		
ANISOU	2059	CE2	TRP	297	1860	2049	2202	-294	-977	4	9
ATOM	2060	CE3	TRP	297	9.040	5.910	40.379	1.000	17.41		
ANISOU	2060	CE3	TRP	297	2778	1740	2096	-388	-916	-234	
ATOM	2061	CD1	TRP	297	8.969	2.400	39.589	1.000	13.58		
ANISOU	2061	CD1	TRP	297	1617	1518	2025	0	-664	114	
ATOM	2062	NE1	TRP	297	9.614	2.444	40.808	1.000	16.12		
ANISOU	2062	NE1	TRP	297	2165	1909	2051	-22	-873	220	
ATOM	2063	CZ2	TRP	297	10.243	4.320	42.341	1.000	19.85		
ANISOU	2063	CZ2	TRP	297	2756	2383	2404	-951	-1337	267	
ATOM	2064	CZ3	TRP	297	9.586	6.466	41.515	1.000	23.40		
ANISOU	2064	CZ3	TRP	297	4215	2030	2645	-1001	-1757	-77	
ATOM	2065	CH2	TRP	297	10.181	5.670	42.486	1.000	21.51		
ANISOU	2065	CH2	TRP	297	3178	2457	2537	-910	-1473	-51	
ATOM	2066	C	TRP	297	5.700	3.138	38.882	1.000	10.39		
ANISOU	2066	C	TRP	297	1172	1448	1329	-280	-237	391	
ATOM	2067	O	TRP	297	5.574	2.159	39.639	1.000	13.52		
ANISOU	2067	O	TRP	297	1748	1830	1557	32	-91	703	
ATOM	2068	N	ILE	298	5.033	4.272	39.079	1.000	12.08		
ANISOU	2068	N	ILE	298	1400	1710	1480	-49	83	451	
ATOM	2069	CA	ILE	298	4.223	4.521	40.272	1.000	13.43		
ANISOU	2069	CA	ILE	298	1301	2484	1317	-199	-158	-33	
ATOM	2070	CB	ILE	298	4.370	5.988	40.689	1.000	16.97		
ANISOU	2070	CB	ILE	298	1877	2908	1661	-1000	214	-630	
ATOM	2071	CG2	ILE	298	3.538	6.423	41.876	1.000	22.01		
ANISOU	2071	CG2	ILE	298	3980	3121	1263	-233	546	-339	
ATOM	2072	CG1	ILE	298	5.847	6.253	41.037	1.000	27.10		
ANISOU	2072	CG1	ILE	298	2588	5151	2557	-2140	-708	9	7
ATOM	2073	CD1	ILE	298	6.365	5.522	42.266	1.000	43.13		
ANISOU	2073	CD1	ILE	298	5185	8299	2904	-3717	-3055	708	
ATOM	2074	C	ILE	298	2.772	4.116	40.131	1.000	10.94		
ANISOU	2074	C	ILE	298	1350	1652	1156	-165	-79	9	6

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ATOM   2075 O   ILE 298 2.137  3.844  41-155 1.000 12.67
ANISOU 2075 O   ILE 298 1689   1634   1493   -102  212  3 5 2
ATOM   2076 N   GLY 299 2.267  4.077  38.897 1.000 10.14
ANISOU 2076 N   GLY 299 1412   1057   1384   -51   -377 2 0 1
ATOM   2077 CA  GLY 299 0.866  3.822  38.695 1.000 10.72
ANISOU 2077 CA  GLY 299 1335   1084   1655   0  -229  -2 0 6
ATOM   2078 C   GLY 299 0.049  5.054  38.369 1.000 12.05
ANISOU 2078 C   GLY 299 1422   1293   1864   105   -292 0
ATOM   2079 O   GLY 299 0.585  6.088  37.976 1.000 13.11
ANISOU 2079 O   GLY 299 1917   1199   1866   174   80 - 2 3
ATOM   2080 N   GLY 300 -1.268 4.931  38.490 1.000 13.92
ANISOU 2080 N   GLY 300 1393   1531   2363   182   -410 - 2 2 3
ATOM   2081 CA  GLY 300 -2.237 5.932  38.087 1.000 14.02
ANISOU 2081 CA  GLY 300 1524   1471   2331   217   -563 - 3 3 6
ATOM   2082 C   GLY 300 -2.587 7.015  39.074 1.000 11.97
ANISOU 2082 C   GLY 300 940 1603     2004   67 -488  - 2 9 5
ATOM   2083 O   GLY 300 -3.322 7.950  38.722 1.000 10.90
ANISOU 2083 O   GLY 300 1219   1408   1515   -37   -203 - 1 3 4
ATOM   2084 N   ASN 301 -2.090 6.910  40.285 1.000 11.64
ANISOU 2084 N   ASN 301 948 1557     1917   -383  -327  1 6 5
ATOM   2085 CA  ASN 301 -2.195 7.915  41.323 1.000 13.39
ANISOU 2085 CA  ASN 301 1626   1904   1557   -191  -403 1 8 3
ATOM   2086 CB  ASN 301 -3.047 7.301  42.427 1.000 17.60
ANISOU 2086 CB  ASN 301 1391   2869   2426   -9 326 2 2 8
ATOM   2087 CG  ASN 301 -4.021 8.196  43.108 1.000 19.15
ANISOU 2087 CG  ASN 301 2549   2827   1900   805   59 3 7 7
ATOM   2088 OD1 ASN 301 -5.072 8.606  42.591 1.000 15.47
ANISOU 2088 OD1 ASN 301 1258   2340   2280   -253  339  - 8
ATOM   2089 ND2 ASN 301 -3.661 8.510  44.367 1.000 29.28
ANISOU 2089 ND2 ASN 301 3585   4783   2758   1521  -850 - 8 8 5
ATOM   2090 C   ASN 301 -0.862 8.331  41.914 1.000 11.31
ANISOU 2090 C   ASN 301 1436   1669   1194   1  1  -1 6 8
ATOM   2091 O   ASN 301 -0.033 7.456  42.221 1.000 12.03
ANISOU 2091 O   ASN 301 1483   1548   1542   -151  -279 8  2
ATOM   2092 N   TYR 302 -0.634 9.628  42.133 1.000 11.53
ANISOU 2092 N   TYR 302 1186   1584   1611   -61   26 1 0 2
ATOM   2093 CA  TYR 302 0.573  10.046 42.838 1.000 11.90
ANISOU 2093 CA  TYR 302 1260   1395   1865   5  -212  2 2 5
ATOM   2094 CB  TYR 302 0.657  11.589 43.036 1.000 13.14
ANISOU 2094 CB  TYR 302 1768   1404   1820   -273  190  1 8 1
ATOM   2095 CG  TYR 302 1.082  12.287 41.750 1.000 10.88
ANISOU 2095 CG  TYR 302 1395   1347   1393   -321  2  -1 5 3
ATOM   2096 CD1 TYR 302 2.421  12.439 41.413 1.000 11.29
ANISOU 2096 CD1 TYR 302 1385   1246   1659   -58   98 - 4 6
ATOM   2097 CE1 TYR 302 2.859  13.075 40.248 1.000 10.60
ANISOU 2097 CE1 TYR 302 1055   1241   1732   -11   52 - 1
ATOM   2098 CD2 TYR 302 0.161  12.793 40.858 1.000 11.30
ANISOU 2098 CD2 TYR 302 1304   1332   1656   -145  105  - 2 6
ATOM   2099 CE2 TYR 302 0.573  13.406 39.690 1.000 11.72
ANISOU 2099 CE2 TYR 302 1013   1733   1708   -288  -138 1 6 1
ATOM   2100 CZ  TYR 302 1.907  13.551 39.375 1.000 10.35
ANISOU 2100 CZ  TYR 302 1009   1214   1709   -229  -50  - 1 9
ATOM   2101 OH  TYR 302 2.284  14.153 38.202 1.000 11.82
ANISOU 2101 OH  TYR 302 1192   1532   1766   -8 102 1 0 4
ATOM   2102 C   TYR 302 0.654  9.349  44.196 1.000 12.45
ANISOU 2102 C   TYR 302 1517   1450   1765   -181  -202 2 1 7
ATOM   2103 O   TYR 302 -0.375 9.230  44.878 1.000 13.55
ANISOU 2103 O   TYR 302 1464   1925   1759   -339  -211 7
ATOM   2104 N   VAL 303 1.868  8.967  44.542 1.000 12.06
ANISOU 2104 N   VAL 303 1517   1653   1413   -135  -3 3 4 0
ATOM   2105 CA  VAL 303 2.309  8.430  45.820 1.000 11.88
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ANISOU	2105	CA	VAL	303	1434	1609	1471	-368	-197	2	2	3
ATOM	2106	CB	VAL	303	2.755	6.967	45.736	1.000	14.57			
ANISOU	2106	CB	VAL	303	1395	1682	2459	-217	-918	3	1	2
ATOM	2107	CG1	VAL	303	3.131	6.462	47.132	1.000	17.33			
ANISOU	2107	CG1	VAL	303	2644	1608	2331	-48	-1114	6	1	
ATOM	2108	CG2	VAL	303	1.703	6.041	45.122	1.000	14.80			
ANISOU	2108	CG2	VAL	303	1876	1676	2069	-592	-639	3	2	2
ATOM	2109	C	VAL	303	3.467	9.328	46.303	1.000	13.88			
ANISOU	2109	C	VAL	303	870	1791	2613	75	-286	-3	7	5
ATOM	2110	O	VAL	303	4.526	9.417	45.681	1.000	19.70			
ANISOU	2110	O	VAL	303	1064	2307	4114	-61	323	-9	9	9
ATOM	2111	N	ASN	304	3.271	10.046	47.393	1.000	13.77			
ANISOU	2111	N	ASN	304	1681	1815	1737	-479	-388	1	4	0
ATOM	2112	CA	ASN	304	4.205	11.077	47.828	1.000	13.37			
ANISOU	2112	CA	ASN	304	1626	1240	2212	-213	-533	2	7	9
ATOM	2113	CB	ASN	304	3.460	12.223	48.566	1.000	13.24			
ANISOU	2113	CB	ASN	304	1206	1454	2370	-243	-344	2	9	6
ATOM	2114	CG	ASN	304	2.457	12.922	47.667	1.000	14.16			
ANISOU	2114	CG	ASN	304	1142	2326	1910	146	-88	2	3	0
ATOM	2115	OD1	ASN	304	2.776	13.283	46.540	1.000	16.65			
ANISOU	2115	OD1	ASN	304	1408	2456	2464	107	185	9	1	6
ATOM	2116	ND2	ASN	304	1.263	13.126	48.209	1.000	17.45			
ANISOU	2116	ND2	ASN	304	1414	2961	2257	545	181	3	1	5
ATOM	2117	C	ASN	304	5.325	10.588	48.728	1.000	11.18			
ANISOU	2117	C	ASN	304	1382	1299	1566	-183	-163	1	1	2
ATOM	2118	O	ASN	304	6.396	11.232	48.699	1.000	12.07			
ANISOU	2118	O	ASN	304	1325	1382	1879	-167	-66	-5	9	
ATOM	2119	N	ILE	305	5.092	9.541	49.516	1.000	12.56			
ANISOU	2119	N	ILE	305	1791	1296	1685	-152	-232	2	0	2
ATOM	2120	CA	ILE	305	6.063	9.011	50.463	1.000	14.01			
ANISOU	2120	CA	ILE	305	2314	1393	1614	-55	-479	7	9	
ATOM	2121	CB	ILE	305	5.781	9.493	51.906	1.000	14.44			
ANISOU	2121	CB	ILE	305	2223	1604	1659	-29	-217	1	5	7
ATOM	2122	CG2	ILE	305	5.725	11.017	51.956	1.000	15.31			
ANISOU	2122	CG2	ILE	305	1768	1608	2441	43	-479	-3	1	4
ATOM	2123	CG1	ILE	305	4.543	8.853	52.498	1.000	14.83			
ANISOU	2123	CG1	ILE	305	1779	1694	2163	27	-307	-1	5	3
ATOM	2124	CD1	ILE	305	4.163	9.252	53.900	1.000	28.68			
ANISOU	2124	CD1	ILE	305	3788	5324	1786	-1491	381	9	2	
ATOM	2125	C	ILE	305	6.059	7.487	50.389	1.000	12.79			
ANISOU	2125	C	ILE	305	1703	1355	1800	-260	-586	2	3	1
ATOM	2126	O	ILE	305	5.111	6.864	49.897	1.000	15.63			
ANISOU	2126	O	ILE	305	1779	1564	2597	-185	-1008	2	7	7
ATOM	2127	N	ARG	306	7.170	6.896	50.829	1.000	13.04			
ANISOU	2127	N	ARG	306	1618	1389	1946	-368	-598	3	8	3
ATOM	2128	CA	ARG	306	7.340	5.435	50.868	1.000	11.82			
ANISOU	2128	CA	ARG	306	1352	1366	1773	-375	-154	4	4	4
ATOM	2129	CB	ARG	306	8.111	4.965	49.640	1.000	15.28			
ANISOU	2129	CB	ARG	306	1976	1941	1886	-368	-19	1	1	1
ATOM	2130	CG	ARG	306	8.203	3.472	49.395	1.000	17.16			
ANISOU	2130	CG	ARG	306	2566	1953	2001	-68	-68	7	6	
ATOM	2131	CD	ARG	306	8.344	3.075	47.937	1.000	19.51			
ANISOU	2131	CD	ARG	306	2921	2361	2130	-397	-396	-3	0	2
ATOM	2132	NE	ARG	306	7.078	3.198	47.212	1.000	20.65			
ANISOU	2132	NE	ARG	306	2693	2844	2309	-1056	-310	2	1	4
ATOM	2133	CZ	ARG	306	6.948	3.186	45.893	1.000	17.11			
ANISOU	2133	CZ	ARG	306	2006	2225	2268	45	-91	5	9	6
ATOM	2134	NH1	ARG	306	8.013	3.065	45.083	1.000	21.58			
ANISOU	2134	NH1	ARG	306	2405	2677	3116	-232	381	-6	6	9
ATOM	2135	NH2	ARG	306	5.734	3.301	45.365	1.000	17.51			
ANISOU	2135	NH2	ARG	306	2235	1550	2868	150	-484	-1	6	2

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ATOM   2136 C    ARG  306 8.035   5.027   52.155 1.000 13.45
ANISOU 2136 C    ARG  306 2254    1018    1837    -246  -481 9  8
ATOM   2137 O    ARG  306 9.006   5.682   52.556 1.000 12.15
ANISOU 2137 O    ARG  306 1902    1099    1615    -18   -362 - 8 0
ATOM   2138 N    ARG  307 7.571   3.968   52.811 1.000 18.19
ANISOU 2138 N    ARG  307 3073    1620    2218    -734  -938 7 9 2
ATOM   2139 CA   ARG  307 8.197   3.380   53.989 1.000 19.20
ANISOU 2139 CA   ARG  307 3053    1963    2277    -675  -1236 6 4 3
ATOM   2140 C    ARG  307 9.086   2.191   53.611 1.000 23.08
ANISOU 2140 C    ARG  307 4018    1905    2847    -270  -1885 3 2 9
ATOM   2141 O    ARG  307 8.636   1.292   52.895 1.000 35.93
ANISOU 2141 O    ARG  307 6003    2403    5244    38 -3227 - 7 9 1
ATOM   2142 CB   ARG  307 7.131   2.918   54.997 1.000 28.25
ANISOU 2142 CB   ARG  307 5557    3297    1882    -1503 -277 5 0 9
ATOM   2143 CG   ARG  307 6.032   3.921   55.275 1.000 33.39
ANISOU 2143 CG   ARG  307 4564    4859    3261    -1613 731  2 0 8
ATOM   2144 CD   ARG  307 5.022   3.523   56.317 1.000 40.42
ANISOU 2144 CD   ARG  307 6335    5701    3322    -1900 1263 9 7 1
ATOM   2145 NE   ARG  307 5.605   2.952   57.529 1.000 50.83
ANISOU 2145 NE   ARG  307 8119    7287    3908    -2786 105  1 6 2 4
ATOM   2146 CZ   ARG  307 4.894   2.441   58.530 1.000 51.36
ANISOU 2146 CZ   ARG  307 7424    8064    4025    -3650 -966 2 4 5 1
ATOM   2147 NH1  ARG  307 3.567   2.422   58.485 1.000 69.51
ANISOU 2147 NH1  ARG  307 7586    10951   7874    -6970 -2008 3 2 4 5
ATOM   2148 NH2  ARG  307 5.489   1.937   59.600 1.000 59.99
ANISOU 2148 NH2  ARG  307 10714   8150    3930    -5986 -3291 2 0 2 8
ATOM   2149 N    THR  308 10.347  2.147   54.048 1.000 22.92
ANISOU 2149 N    THR  308 2759    2587    3364    -589  -200 1 7 0
ATOM   2150 CA   THR  308 11.215  1.009   53.794 1.000 24.47
ANISOU 2150 CA   THR  308 3382    2649    3268    -360   52 1 5 0
ATOM   2151 C    THR  308 10.602  -0.252  54.382 1.000 31.10
ANISOU 2151 C    THR  308 5251    2520    4044    -768   16 2 7 9
ATOM   2152 O    THR  308 10.610  -1.292  53.718 1.000 31.44
ANISOU 2152 O    THR  308 4573    2676    4696    -457  -1745 - 4 0
ATOM   2153 CB   THR  308 12.615  1.279   54.378 1.000 23.51
ANISOU 2153 CB   THR  308 3718    2086    3131    413   -694 5 4 2
ATOM   2154 OG1  THR  308 13.195  2.410   53.705 1.000 23.61
ANISOU 2154 OG1  THR  308 2711    2503    3754    153   437  - 9
ATOM   2155 CG2  THR  308 13.573  0.141   54.117 1.000 26.37
ANISOU 2155 CG2  THR  308 4427    2796    2796    927   -329 - 1 8
ATOM   2156 N    SER  309 10.066  -0.156  55.596 1.000 28.39
ANISOU 2156 N    SER  309 3759    2774    4252    -19   2  1 3 0 0
ATOM   2157 CA   SER  309 9.488   -1.335  56.238 1.000 34.69
ANISOU 2157 CA   SER  309 6110    3146    3925    -1066 -1089 1 6 2 6
ATOM   2158 C    SER  309 8.109   -1.737  55.724 1.000 41.41
ANISOU 2158 C    SER  309 6442    3910    5383    -2171 -1170 2 1 4 4
ATOM   2159 O    SER  309 7.672   -2.884  55.952 1.000 57.05
ANISOU 2159 O    SER  309 11389   5141    5146    -4907 -2077 2 0 2 7
ATOM   2160 CB   SER  309 9.450   -1.104  57.755 1.000 31.61
ANISOU 2160 CB   SER  309 4863    2958    4188    -483  368  9 6 2
ATOM   2161 OG   SER  309 8.485   -0.135  58.107 1.000 38.99
ANISOU 2161 OG   SER  309 4731    3477    6604    313   -2249 - 4 9 6
ATOM   2162 N    LYS  310 7.391   -0.868  55.032 1.000 47.69
ANISOU 2162 N    LYS  310 5502    5577    7040    -539  -1369 1 5 8 3
ATOM   2163 FE   IUM  312 8.574   13.466  54.055 1.000 11.05
ANISOU 2163 FE   IUM  312 1690    1156    1351    -101  -237 7  1
ATOM   2164 C1   AKG  313 5.987   14.815  54.612 1.000 19.65
ANISOU 2164 C1   AKG  313 2777    2119    2572    258   -117 5 5 6
ATOM   2165 O1   AKG  313 4.799   15.240  54.659 1.000 20.82
ANISOU 2165 O1   AKG  313 2957    2293    2659    514   -234 2 6 4
ATOM   2166 O2   AKG  313 6.643   14.144  53.787 1.000 17.79
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ANISOU 2166 O2  AKG 313 2407    1765    2587    74 -377  429
ATOM   2167 C2  AKG 313 6.867   15.178  55.844  1.000 20.08
ANISOU 2167 C2  AKG 313 1997    2566    3068    -528  419  -399
ATOM   2168 O5  AKG 313 7.982   14.661  55.821  1.000 17.60
ANISOU 2168 O5  AKG 313 2289    2066    2334    -314  226  -252
ATOM   2169 C3  AKG 313 6.272   16.080  56.872  1.000 21.69
ANISOU 2169 C3  AKG 313 2751    1910    3581    240   62  -327
ATOM   2170 C4  AKG 313 7.318   16.741  57.716  1.000 21.50
ANISOU 2170 C4  AKG 313 3246    1761    3160    199  -143  -185
ATOM   2171 C5  AKG 313 6.923   17.816  58.672  1.000 22.58
ANISOU 2171 C5  AKG 313 3122    1840    3618    755  -495  -313
ATOM   2172 O3  AKG 313 7.754   18.591  59.124  1.000 27.48
ANISOU 2172 O3  AKG 313 3581    2470    4389    -34   602  -1266
ATOM   2173 O4  AKG 313 5.660   17.889  58.999  1.000 28.55
ANISOU 2173 O4  AKG 313 3191    2809    4846    612  -246  -1148
ATOM   2174 S   SO4 401 11.676  0.439   24.942  1.000 40.14
ATOM   2175 O1  SO4 401 11.293  0.826   26.321  1.000 33.12
ATOM   2176 O2  SO4 401 12.501  -0.829  25.014  1.000 35.79
ATOM   2177 O3  SO4 401 10.430  0.189   24.129  1.000 54.89
ATOM   2178 O4  SO4 401 12.500  1.520   24.329  1.000 44.80
ATOM   2179 OW  HOH 501 -6.455  10.219  44.319  1.000 14.29
ATOM   2180 OW  HOH 502 -10.520 18.612  50.560  1.000 12.86
ATOM   2181 OW  HOH 503 -8.644  16.907  47.858  1.000 16.83
ATOM   2182 OW  HOH 504 -10.313 20.800  43.074  1.000 16.10
ATOM   2183 OW  HOH 505 -6.051  19.199  52.602  1.000 16.38
ATOM   2184 OW  HOH 506 -6.873  24.642  47.100  1.000 20.55
ATOM   2185 OW  HOH 507 10.676  -4.179  46.406  1.000 27.41
ATOM   2186 OW  HOH 508 -0.077  21.786  40.872  1.000 15.22
ATOM   2187 OW  HOH 509 5.761   13.656  46.041  1.000 17.40
ATOM   2188 OW  HOH 510 29.135  31.449  51.982  1.000 18.40
ATOM   2189 OW  HOH 511 26.032  32.724  52.741  1.000 17.03
ATOM   2190 OW  HOH 512 10.965  32.371  46.000  1.000 16.70
ATOM   2191 OW  HOH 513 23.871  24.457  58.649  1.000 18.71
ATOM   2192 OW  HOH 514 26.353  29.063  50.326  1.000 18.96
ATOM   2193 OW  HOH 515 23.191  33.106  53.153  1.000 20.41
ATOM   2194 OW  HOH 516 21.429  11.721  55.329  1.000 18.39
ATOM   2195 OW  HOH 517 9.122   15.567  53.585  1.000 24.87
ATOM   2196 OW  HOH 518 27.843  17.352  53.437  1.000 27.76
ATOM   2197 OW  HOH 519 -14.415 20.029  44.444  1.000 23.47
ATOM   2198 OW  HOH 520 15.253  33.050  51.771  1.000 27.20
ATOM   2199 OW  HOH 521 14.080  31.486  44.302  1.000 21.58
ATOM   2200 OW  HOH 522 17.770  33.842  53.596  1.000 23.56
ATOM   2201 OW  HOH 523 3.671   24.673  36.173  1.000 20.95
ATOM   2202 OW  HOH 524 -15.683 28.618  52.535  1.000 24.05
ATOM   2203 OW  HOH 525 -5.386  20.413  39.013  1.000 26.85
ATOM   2204 OW  HOH 526 10.417  27.949  58.778  1.000 28.33
ATOM   2205 OW  HOH 527 23.165  19.592  62.202  1.000 29.36
ATOM   2206 OW  HOH 528 23.736  10.550  55.737  1.000 24.02
ATOM   2207 OW  HOH 529 -1.662  28.650  42.485  1.000 21.62
ATOM   2208 OW  HOH 530 -4.689  10.177  46.511  1.000 31.65
ATOM   2209 OW  HOH 531 1.545   35.657  50.866  1.000 19.59
ATOM   2210 OW  HOH 532 0.980   22.687  36.818  1.000 30.57
ATOM   2211 OW  HOH 533 -12.450 16.848  56.071  1.000 28.42
ATOM   2212 OW  HOH 534 -9.418  16.139  51.364  1.000 22.60
ATOM   2213 OW  HOH 535 32.711  25.816  43.116  1.000 31.44
ATOM   2214 OW  HOH 536 27.068  24.587  55.468  1.000 23.32
ATOM   2215 OW  HOH 537 13.523  11.832  51.199  1.000 10.73
ATOM   2216 OW  HOH 538 8.513   16.158  35.074  1.000 12.26
ATOM   2217 OW  HOH 539 0.922   2.590   35.058  1.000 14.79
ATOM   2218 OW  HOH 540 -1.548  3.709   34.484  1.000 14.25
ATOM   2219 OW  HOH 541 11.711  16.898  30.416  1.000 17.84
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ATOM   2220 OW  HOH  542 15.389  11.536  32.065  1.000 17.88
ATOM   2221 OW  HOH  543 18.496   6.995  52.191  1.000 17.47
ATOM   2222 OW  HOH  544 19.848  22.580  35.334  1.000 17.28
ATOM   2223 OW  HOH  545 -0.387   4.787  41.967  1.000 13.22
ATOM   2224 OW  HOH  546 23.502  12.662  35.308  1.000 18.14
ATOM   2225 OW  HOH  547 10.332  25.236  33.926  1.000 19.05
ATOM   2226 OW  HOH  548 21.447  20.605  34.090  1.000 17.24
ATOM   2227 OW  HOH  549 8.164   7.685  27.077  1.000 25.40
ATOM   2228 OW  HOH  550 14.393  -5.127  40.321  1.000 15.88
ATOM   2229 OW  HOH  551 12.873  29.356  39.662  1.000 16.45
ATOM   2230 OW  HOH  552 11.974  24.144  58.426  1.000 19.71
ATOM   2231 OW  HOH  553 17.521   7.949  33.182  1.000 17.90
ATOM   2232 OW  HOH  554 3.401   2.691  43.340  1.000 23.76
ATOM   2233 OW  HOH  555 18.669  28.057  40.079  1.000 18.44
ATOM   2234 OW  HOH  556 10.827  12.928  30.017  1.000 19.57
ATOM   2235 OW  HOH  557 20.630  16.270  66.466  1.000 20.84
ATOM   2236 OW  HOH  558 11.315  20.266  64.044  1.000 21.62
ATOM   2237 OW  HOH  559 26.277  14.516  43.946  1.000 16.22
ATOM   2238 OW  HOH  560 9.616  15.488  32.365  1.000 19.40
ATOM   2239 OW  HOH  561 8.888   4.903  27.857  1.000 22.74
ATOM   2240 OW  HOH  562 20.496  -1.851  42.511  1.000 22.98
ATOM   2241 OW  HOH  563 17.033  29.415  38.332  1.000 26.36
ATOM   2242 OW  HOH  564 18.595   6.141  37.697  1.000 25.10
ATOM   2243 OW  HOH  565 22.446  13.893  31.420  1.000 29.00
ATOM   2244 OW  HOH  566 6.586   3.577  28.350  1.000 27.82
ATOM   2245 OW  HOH  567 6.250  20.077  30.961  1.000 23.27
ATOM   2246 OW  HOH  568 7.341  16.113  31.186  1.000 28.59
ATOM   2247 OW  HOH  569 16.090  32.070  42.552  1.000 33.08
ATOM   2248 OW  HOH  570 11.500  28.806  37.258  1.000 25.17
ATOM   2249 OW  HOH  571 12.901  26.768  58.591  1.000 28.58
ATOM   2250 OW  HOH  572 -17.071 17.043  50.450  1.000 28.82
ATOM   2251 OW  HOH  573 25.262   7.705  37.199  1.000 39.05
ATOM   2252 OW  HOH  574 32.884  26.440  51.734  1.000 29.03
ATOM   2253 OW  HOH  575 -1.199  19.088  42.527  1.000 14.86
ATOM   2254 OW  HOH  576 -4.389  33.026  63.392  1.000 29.56
ATOM   2255 OW  HOH  577 17.569  25.732  32.249  1.000 20.62
ATOM   2256 OW  HOH  578 -19.107 12.822  67.516  1.000 22.35
ATOM   2257 OW  HOH  579 29.333  19.198  51.975  1.000 22.51
ATOM   2258 OW  HOH  580 27.950  27.635  51.903  1.000 25.40
ATOM   2259 OW  HOH  581 -21.085 14.501  68.535  1.000 21.19
ATOM   2260 OW  HOH  582 1.529  17.378  33.953  1.000 25.29
ATOM   2261 OW  HOH  583 9.138  20.887  66.894  1.000 33.92
ATOM   2262 OW  HOH  584 -11.896 19.091  44.780  1.000 17.48
ATOM   2263 OW  HOH  585 6.382  12.597  43.347  1.000 22.09
ATOM   2264 OW  HOH  586 17.762  21.268  29.046  1.000 20.79
ATOM   2265 OW  HOH  587 -11.500 25.438  41.729  1.000 29.68
ATOM   2266 OW  HOH  588 7.877   1.046  29.689  1.000 27.70
ATOM   2267 OW  HOH  589 27.985  13.540  42.235  1.000 25.91
ATOM   2268 OW  HOH  590 1.276  14.852  34.021  1.000 20.41
ATOM   2269 OW  HOH  591 24.622  24.179  41.242  1.000 26.77
ATOM   2270 OW  HOH  592 0.404  14.096  36.006  1.000 27.92
ATOM   2271 OW  HOH  593 -2.835  36.981  57.827  1.000 31.86
ATOM   2272 OW  HOH  594 3.276   0.788  39.940  1.000 32.07
ATOM   2273 OW  HOH  595 11.025  -8.794  31.468  1.000 27.18
ATOM   2274 OW  HOH  596 6.301   2.276  42.639  1.000 29.74
ATOM   2275 OW  HOH  597 29.302  16.146  62.924  1.000 43.75
ATOM   2276 OW  HOH  598 19.039  20.964  67.011  1.000 30.85
ATOM   2277 OW  HOH  599 8.380  22.088  64.518  1.000 42.62
ATOM   2278 OW  HOH  600 21.480  10.826  34.742  1.000 25.74
ATOM   2279 OW  HOH  601 -2.907  21.956  38.566  1.000 30.92
ATOM   2280 OW  HOH  602 -3.928  29.841  43.352  1.000 43.96
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ATOM	2281	OW	HOH	603	2.885	21.563	34.437	1.000	33.10
ATOM	2282	OW	HOH	604	11.801	6.043	25.270	1.000	38.18
ATOM	2283	OW	HOH	605	-1.019	17.197	40.472	1.000	18.48
ATOM	2284	OW	HOH	606	18.382	23.349	68.110	1.000	22.54
ATOM	2285	OW	HOH	607	-8.141	8.137	45.609	1.000	17.64
ATOM	2286	OW	HOH	608	5.022	2.667	51.700	1.000	24.29
ATOM	2287	OW	HOH	609	17.557	10.755	33.490	1.000	21.94
ATOM	2288	OW	HOH	610	11.222	1.201	49.675	1.000	20.61
ATOM	2289	OW	HOH	611	4.243	35.047	50.509	1.000	22.18
ATOM	2290	OW	HOH	612	11.103	4.031	56.082	1.000	22.08
ATOM	2291	OW	HOH	613	11.366	31.522	36.791	1.000	32.32
ATOM	2292	OW	HOH	614	-21.189	24.787	52.739	1.000	31.83
ATOM	2293	OW	HOH	615	7.847	-1.491	30.674	1.000	24.77
ATOM	2294	OW	HOH	616	19.041	11.937	31.445	1.000	25.97
ATOM	2295	OW	HOH	617	6.221	29.879	40.410	1.000	29.24
ATOM	2296	OW	HOH	618	17.266	5.933	35.280	1.000	23.72
ATOM	2297	OW	HOH	619	5.983	-7.215	28.510	1.000	28.19
ATOM	2298	OW	HOH	620	22.574	8.129	57.639	1.000	30.97
ATOM	2299	OW	HOH	621	2.553	7.806	60.287	1.000	28.77
ATOM	2300	OW	HOH	622	29.939	25.812	51.234	1.000	34.00
ATOM	2301	OW	HOH	623	2.205	34.823	53.632	1.000	25.88
ATOM	2302	OW	HOH	624	18.091	13.838	67.343	1.000	28.46
ATOM	2303	OW	HOH	625	8.342	3.195	58.475	1.000	26.84
ATOM	2304	OW	HOH	626	-16.086	18.427	42.790	1.000	31.11
ATOM	2305	OW	HOH	627	-2.098	13.445	35.620	1.000	27.48
ATOM	2306	OW	HOH	628	0.481	30.471	42.834	1.000	32.55
ATOM	2307	OW	HOH	629	13.368	33.845	42.899	1.000	28.70
ATOM	2308	OW	HOH	630	-13.792	14.642	51.533	1.000	25.58
ATOM	2309	OW	HOH	631	3.299	1.461	29.242	1.000	39.62
ATOM	2310	OW	HOH	632	-16.012	20.690	46.705	1.000	27.75
ATOM	2311	OW	HOH	633	19.606	8.142	31.259	1.000	27.02
ATOM	2312	OW	HOH	634	5.077	7.954	57.205	1.000	30.59
ATOM	2313	OW	HOH	635	-1.502	6.963	45.877	1.000	35.68
ATOM	2314	OW	HOH	636	9.974	17.449	38.804	1.000	21.84
ATOM	2315	OW	HOH	637	-22.829	12.836	67.228	1.000	25.04
ATOM	2316	OW	HOH	638	6.275	34.333	39.722	1.000	25.88
ATOM	2317	OW	HOH	639	2.248	19.798	56.051	1.000	26.67
ATOM	2318	OW	HOH	640	-20.552	17.013	67.454	1.000	31.34
ATOM	2319	OW	HOH	641	9.298	16.570	28.911	1.000	29.96
ATOM	2320	OW	HOH	642	-1.732	11.113	60.074	1.000	28.13
ATOM	2321	OW	HOH	643	34.157	23.604	44.657	1.000	36.36
ATOM	2322	OW	HOH	644	24.298	20.199	33.576	1.000	34.90
ATOM	2323	OW	HOH	645	13.803	-4.667	31.570	1.000	32.66
ATOM	2324	OW	HOH	646	6.295	-2.594	29.009	1.000	34.61
ATOM	2325	OW	HOH	647	5.623	37.039	49.318	1.000	28.08
ATOM	2326	OW	HOH	648	-18.805	19.286	46.868	1.000	38.32
ATOM	2327	OW	HOH	649	16.026	35.829	49.382	1.000	34.45
ATOM	2328	OW	HOH	650	-12.187	28.769	45.330	1.000	27.36
ATOM	2329	OW	HOH	651	21.344	5.778	55.101	1.000	27.43
ATOM	2330	OW	HOH	652	-1.848	2.125	32.240	1.000	32.02
ATOM	2331	OW	HOH	653	-14.568	18.811	55.775	1.000	29.95
ATOM	2332	OW	HOH	654	-8.655	26.254	38.301	1.000	32.07
ATOM	2333	OW	HOH	655	18.836	13.542	28.102	1.000	32.24
ATOM	2334	OW	HOH	656	16.217	14.669	25.619	1.000	33.35
ATOM	2335	OW	HOH	657	28.678	14.477	38.043	1.000	30.94
ATOM	2336	OW	HOH	658	-11.834	15.408	53.330	1.000	33.25
ATOM	2337	OW	HOH	659	-1.317	38.273	59.599	1.000	34.45
ATOM	2338	OW	HOH	660	8.784	13.918	28.681	1.000	33.62
ATOM	2339	OW	HOH	661	-3.058	14.508	47.405	1.000	28.79
ATOM	2340	OW	HOH	662	10.968	33.651	38.533	1.000	36.21
ATOM	2341	OW	HOH	663	28.960	21.602	53.665	1.000	29.25

ATOM	2342	OW	HOH	664	-10.709	26.808	39.175	1.000	42.71
ATOM	2343	OW	HOH	665	17.790	7.093	55.023	1.000	30.29
ATOM	2344	OW	HOH	666	6.404	24.865	29.848	1.000	34.55
ATOM	2345	OW	HOH	667	-15.418	19.777	58.341	1.000	33.82
ATOM	2346	OW	HOH	668	0.000	0.000	37.259	0.330	49.90
ATOM	2347	OW	HOH	669	19.652	24.610	33.660	1.000	31.77
ATOM	2348	OW	HOH	670	17.188	9.619	29.950	1.000	29.94
ATOM	2349	OW	HOH	671	17.708	2.958	28.338	1.000	34.94
ATOM	2350	OW	HOH	672	-0.059	3.652	30.079	1.000	32.23
ATOM	2351	OW	HOH	673	29.037	20.923	56.153	1.000	28.52
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ATOM	2354	OW	HOH	676	10.299	39.666	49.554	1.000	40.30
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ATOM	2362	OW	HOH	684	4.567	10.310	43.503	1.000	24.86
ATOM	2363	OW	HOH	685	19.443	5.558	61.133	1.000	36.06
ATOM	2364	OW	HOH	686	3.205	29.499	40.656	1.000	36.99
ATOM	2365	OW	HOH	687	32.498	16.774	43.447	1.000	41.18
ATOM	2366	OW	HOH	688	28.166	23.113	57.593	1.000	35.56
ATOM	2367	OW	HOH	689	-17.023	23.220	46.759	1.000	30.05
ATOM	2368	OW	HOH	690	15.567	7.782	28.910	1.000	32.51
ATOM	2369	OW	HOH	691	11.780	30.287	57.203	1.000	33.34
ATOM	2370	OW	HOH	692	24.449	12.699	32.400	1.000	34.99
ATOM	2371	OW	HOH	693	26.200	25.005	57.918	1.000	39.38

CLAIMS

1. Deacetoxycephalosporin C synthase (DAOCS) having a structure designated by the X-ray co-ordinates of structure A or structure B herein.

2. DAOCS in the form of a complex with a metal, e.g. iron or lead, and optionally in the presence of a substrate and/or a substrate analogue or inhibitor, having a structure designated by the X-ray co-ordinates herein.

3. DAOCS as claimed in claim 2, wherein the substrate is penicillin N, penicillin G, 2-oxoglutarate or dioxygen, and the inhibitor is selected from N-oxalylamino acids, pyridine-carboxylates and nitrous oxide.

4. Use of the three-dimensional structure of DAOCS for the modification of DAOCS or other related 2-oxoglutarate dependent enzyme.

5. Use as claimed in claim 4, wherein the related 2-oxoglutarate dependent enzyme is DACS, DAOC/DACS or the oxygenase enzyme involved in the introduction of the 7α-methoxy group into cephamycin C.

6. Use as claimed in claim 5 for the modification of DAOCS, DACS or DAOC/DACS such that they accept unnatural substrates more efficiently than the wild type enzymes.

7. Use as claimed in claim 5 for the modification of DAOCS, DACS, DAOC/DACS such that they convert natural substrates to pharmaceuticals or useful intermediates in the preparation of pharmaceuticals.

8. Use as claimed in claim 6 wherein the unnatural substrates are penicillins including penicillin G, penicillin V, 6-aminopenicillanic acid, amoxycillin, or penicillins with a phenyl glycine or p-hydroxyphenyl glycine side chain.

9. Use as claimed in claim 6 wherein the unnatural substrate is a cephalosporin.

10. Use as claimed in claim 6 wherein the unnatural substrate is an amino acid, including the proteinogenic amino acids, or a peptide.

11. Use as claimed in any one of claims 6-8, wherein penicillin G, penicillin V, another unnatural substrate or penicillin N is converted to a cephalosporin or exomethylene cephalosporin.

12. An enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the side chain binding site of penicillin N or DAOC is modified and at at least one of the following sites at least one amino acid residue is changed to another amino acid residue or is deleted: Thr72, Arg74, Arg75, Glu156, Leu158, Arg160, Arg162, Leu186, Ser187, Phe225, Phe264, Arg266, Asp301, Tyr302, Val303, Asn304; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

13. An enzyme having significant (as herein defined) sequence similarity to DAOCS wherein the penicillin/cephalosporin binding site of penicillin N or DAOC is modified and at at least one of the following amino acid residues is changed or deleted: Ile88, Arg160, Arg162, Phe164, Met180, Thr190, Ile192, Phe225, Pro241, Val245, Val262, Phe264, Ile305, Arg306, Arg307; and/or at least one additional amino acid residue is inserted within the region 300-311; provided that other residues interacting with the above may be changed in order to accommodate the change in one of the above.

14. An enzyme according to claim 12 or claim 13 which is a mutant of DAOCS or DACS or DAOC/DACS.

15. An enzyme as claimed in any one of claims 12-14, wherein both the side chain and the penicillin/cephalosporin binding sites of penicillin N or DAOC are modified and at least one of the residues specified in claims 12 and 13 is changed or deleted.

16. An enzyme as claimed in any one of claims 12-15, wherein two or more complementary mutations are introduced to create or delete a binding interaction, including H-bonds, electrostatic, or hydrophobic interactions.

17. A gene encoding for the enzyme of any one of claims 12-16.

18. A micro-organism capable of expressing the gene of claim 17 under fermentation conditions.

19. Use of micro-organisms of claim 18 for the production of beta-lactams of the penicillin or cephalosporin (including cepham) families.

20. Use as claimed in claim 19 wherein the micro-organism contains another modified enzyme of the penicillin and cephalosporin biosynthesis pathway including isopenicillin N synthase, amidohydrolase/acetyltransferase, or L-delta-(aminoadipoyl)-L-cysteine-D-valine (ACV) synthetase.

21. A method which comprises using the three-dimensional structure of DAOCS for determining or predicting the structure of another related 2-oxoglutarate dependent enzyme or related enzyme not from the penicillin and cephalosporin biosynthesis pathway, and using the structural information so obtained for modifying the other enzyme or for designing an inhibitor for the other enzyme.

22. A method as claimed in claim 21 wherein the said other related 2-oxoglutarate dependent enzyme or related enzyme is 1-aminocylopropane-1-carboxylate oxidase, gibberellin C-20 oxidase, flavone synthase, flavanone 3β-hydroxylase, hyoscyamine 6β-hydroxylase, prolyl 4-hydroxylase, prolyl 3-hydroxylase, aspartyl hydroxylase, lysyl hydroxylase, proline hydroxylases, γ-butyrobetaine hydroxylase, enzymes in herbicide resistance mechanisms, clavaminate synthase, an oxygenase enzyme involved in the biosynthesis of carbapenems, the so called ethylene forming enzyme from *Pseudomonas syringe*, p-hydroxyphenylpyruvate dioxygenase, and an oxygenase enzyme involved in the oxidation of phytol in human liver peroxisomes.

23. A method as claimed in claim 21 or 22, wherein the said other enzyme is modified, by deletion or addition or alteration; at one or more of the sites defined in claim 12 or claim 13; or using the following information for the design or an inhibitor: Asp185, His183 and His243 act as ligands to the iron; Arg258 and Ser260 and the Fe bind the

2-oxoglutarate; Met180, Phe225, Leu31 and Val245 are close to the iron binding site; Tyr33, Arg160, Arg162, Phe164, Ile192, Gln194, Leu204, Leu223, Leu215 are important for the construction of the part of the active site binding 2-oxoglutarate; and Arg160 and Arg162 are important for binding an amino acid or peptide derived substrate.

24. A method as claimed in any one of claims 21-23, wherein the said other enzyme is prolyl 4-hydroxylase, prolyl 3-hydroxylase, aspartyl hydroxylase, or lysyl hydroxylase and the inhibitor is to be used for the treatment of human diseases including fibrotic diseases including liver cirrhosis and arthritis.

25. A method as claimed in any one of claims 21-23, wherein the said other enzyme is p-hydroxyphenylpyruvate dioxygenase and the inhibitor is to be used in the treatment of certain genetic disorders.

26. A method as claimed in any one of claims 21-23, wherein the said other enzyme is involved in herbicide resistance and the information is to be used to design new herbicides to overcome the problem of resistance.

Fig.1.

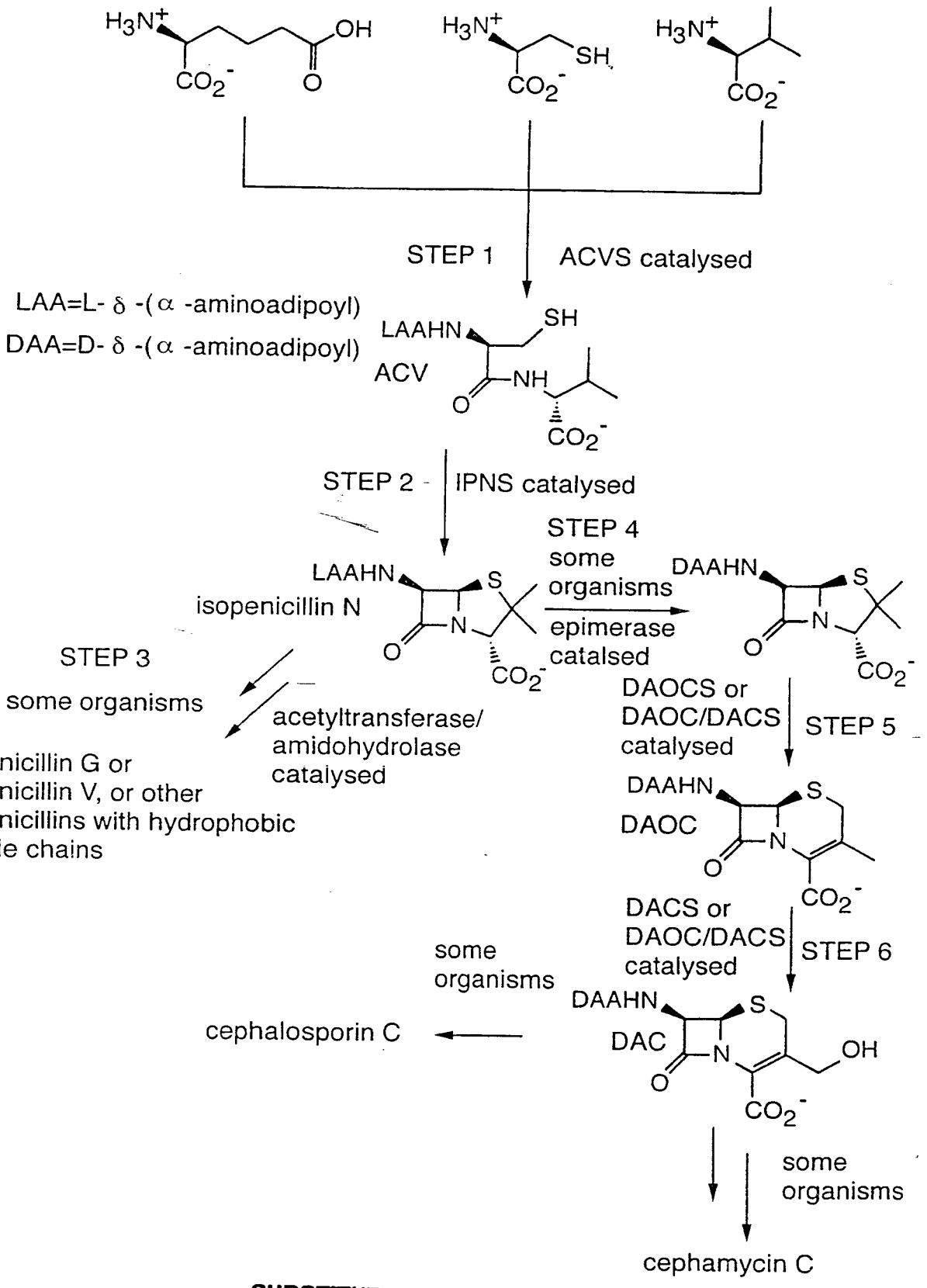
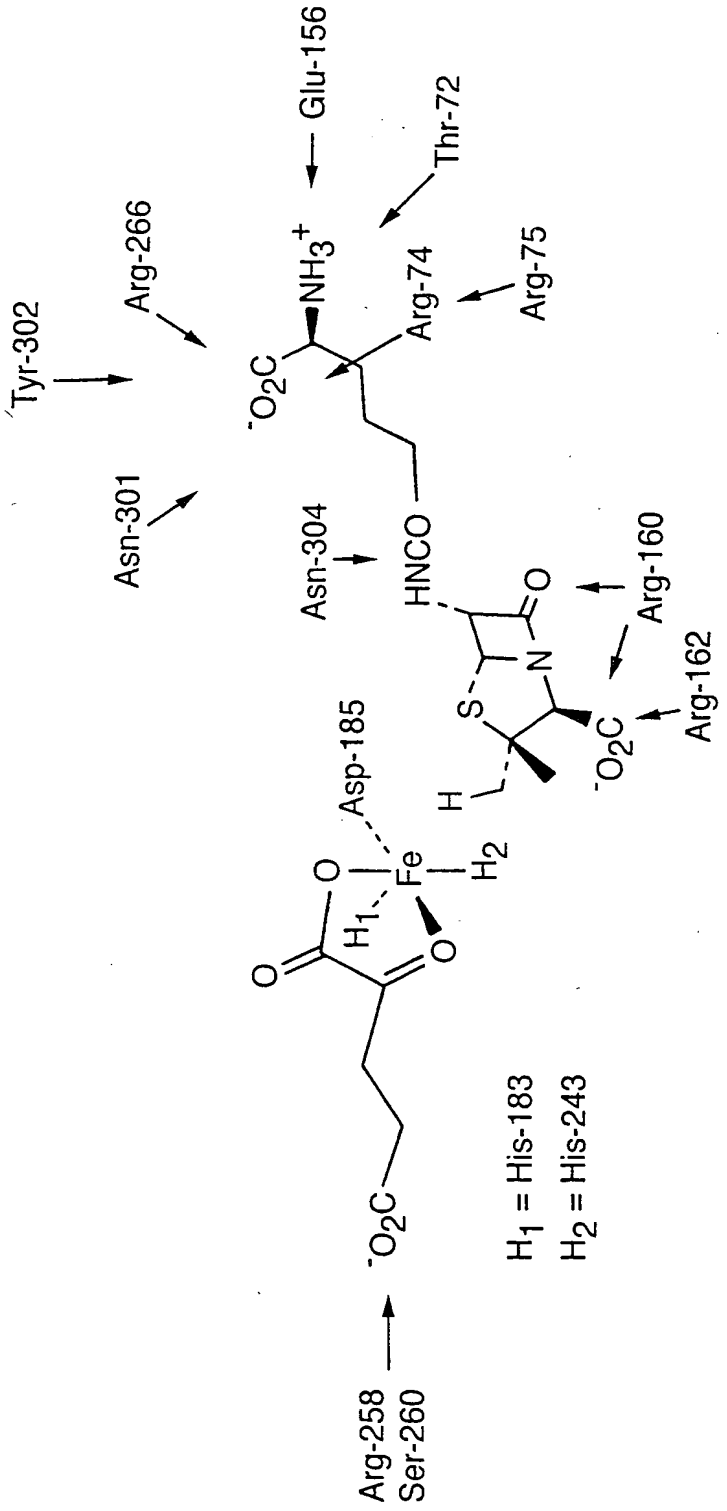

STEP 1
ACVS catalysed
LAA=L- δ -(α -aminoadipoyl)
DAA=D- δ -(α -aminoadipoyl)
LAAHN
ACV
STEP 2
IPNS catalysed
LAAHN
isopenicillin N
STEP 4
some organisms
epimerase catalsed
DAAHN
STEP 3
some organisms
acetyltransferase/ amidohydrolase catalysed
penicillin G or penicillin V, or other penicillins with hydrophobic side chains
DAOCS or DAOC/DACS catalysed
STEP 5
DAAHN
DAOC
DACS or DAOC/DACS catalysed
STEP 6
some organisms
cephalosporin C
DAAHN
DAC
some organisms
cephamycin C

Fig.2.


Glu-156
Thr-72
Arg-266
Tyr-302
Arg-74
Arg-75
Asn-301
Asn-304
HNCO
Arg-160
Arg-162
Asp-185
Arg-258
Ser-260
H1 = His-183
H2 = His-243

INTERNATIONAL SEARCH REPORT

Inte. .ional Application No
PCT/GB 98/03860

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12N15/52 C12N9/00 C12P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 C12N C12P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CORTES, JESUS ET AL: "Purification and characterization of a 2-oxoglutarate-linked ATP-independent deacetoxycephalosporin C synthase of Streptomyces lactamdurans" J. GEN. MICROBIOL. (1987), 133(11), 3165-74 CODEN: JGMIAN;ISSN: 0022-1287, 1987, XP000035085	1
Y	see the whole document	2,3, 21-26

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
15 March 1999	26/03/1999

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Hix, R

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INTERNATIONAL SEARCH REPORT

Int. ional Application No
PCT/GB 98/03860

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ROLLINS, M. J. ET AL: "Purification and initial characterization of deacetoxycephalosporin C synthase from Streptomyces clavuligerus" CAN. J. MICROBIOL. (1988), 34(11), 1196-202 CODEN: CJMIAZ;ISSN: 0008-4166, 1988, XP002095821	1
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
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P,X	WO 98 16648 A (BALDWIN JACK EDWARD ;CLIFTON IAN (GB); ISIS INNOVATION (GB); ROACH) 23 April 1998 see the whole document	1-26
Y	ROACH P L ET AL: "CRYSTAL STRUCTURE OF ISOPENICILLIN N SYNTHASE IS THE FIRST FROM A NEW STRUCTURAL FAMILY OF ENZYMES" NATURE, vol. 375, no. 6533, 22 June 1995, pages 700-704, XP002059796 cited in the application see the whole document	2,3, 21-26
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Y	ROACH P L ET AL: "STRUCTURE OF ISOPENICILLINN SYNTHASE COMPLEXED WITH SUBSTRATE AND THE MECHANISM OF PENICILLIN FORMATION" NATURE, vol. 387, no. 6635, 19 June 1997, pages 827-830, XP002067787 cited in the application see the whole document	2,3, 21-26
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INTERNATIONAL SEARCH REPORT

Inte. ional Application No
PCT/GB 98/03860

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication.where appropriate, of the relevant passages	Relevant to claim No.
A	N. SHIBATA ET AL.: "Adipoyl-6-aminopenicillanic acid is a substrate for deacetoxycephalosporin C synthase (DAOCS)." BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol. 6, no. 113, 1996, pages 1579-1584, XP002095827 cited in the application see the whole document -----	

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